

SAILING DIRECTIONS

FOR THE ISLAND OF

JAMAICA and St. DOMINGUE, or HISPANIOLA,

AND THE

WINDWARD PASSAGES

TO BE USED WITH

The Charts and Plans that are published

FROM

SURVEYS AND OBSERVATIONS,

MADE BY ORDER OF

PHILIP AFFLECK, Esq. Rear Admiral of the White,

*AND COMMANDER IN CHIEF OF HIS MAJESTY'S SHIPS
AND VESSELS AT JAMAICA, &c. &c.*

In part of the Years 1789, 1790, 1791, and part of 1792.

By JOHN LEARD, and Assistants,

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SAILING DIRECTIONS

THE LONDON AND NORTH OCEANIC STEAMSHIP COMPANY

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LATITUDES and LONGITUDES of the PRINCIPAL CAPES, POINTS, &c.

JAMAICA.

	Latitude N.	Longitude.		Latitude N.	Longitude.		Latitude N.	Longitude.
S. E. or Folly Point	17 56 30	76 4 W.	Cape Nicholas Point	19 50 0	73 31 0	West Part	20 29 N.	70 4 W.
East Point	17 58 0	76 3 0	W. end of Tortugas	20 5 30	73 1 0	Turks Is. Sand Key	21 11 0	71 15 W.
Port Royal	17 58 0	76 47 0	Cape Francois	19 46 24	72 18 0	Grand Turk N. Point	21 31 45	71 10 W.
Portland Point	17 42 30	77 8 30	Point la Grange	19 54 30	71 49 30	Cagues Bank, S. E. Part	21 1 0	71 37 W.
John's Point	18 11 30	78 21 0	Rock off Ditto	20 0 30	71 47 5	Shoal of Cape Cornet	21 44 15	71 27 W.
South Negril	18 15 45	78 33 0	Isabella Point	19 59 10	71 10 0	N. Point, or Booby's Rocks	21 57 30	72 4 W.
Montego Bay Point	18 37 30	78 1 30	Old Cape Francois	19 40 30	70 2 0	S. W. Pt. off little Cagues	21 36 15	72 33 W.
Gallina Point	18 29 0	77 53 0	Cape Enganno	18 45 0	68 40 0	Mogane East Reef	22 18 0	72 46 3 W.
N. E. Point	18 13 0	76 14 30	Alvarella	17 29 0	71 32 0	S. W. Point	22 21 40	73 18 W.
FORMIGOS.			Point Abacon	18 1 30	74 56 0	French Keys, West Pt.	22 41 30	73 44 W.
N. E. Part	18 34 30	75 38 0	NAVASSA.	18 13 30	74 56 0	Hogfies, West Point	23 9 10	73 58 W.
S. E. Part	18 28 30	75 40 0	Cuba Cape Maize	20 18 0	74 11 0	Atwood's Key, West Pt.	22 39 0	73 56 W.
S. W. Part	18 28 0	75 48 0	Cumberland Harbor	19 53 30	75 17 20	Crooked Id. East Pt.	22 48 50	74 26 W.
MORANT KEYS.			SEABRANDRECHT.			Bird Rock West Point	22 8 30	74 35 4 W.
N. E. Key	17 26 0	75 54 0	N. E. Part	21 17 0	70 36 0	Mitraparvos, North Pt.	22 56 30	74 38 W.
S. W. Key	17 23 45	75 56 0	N. W. Part	21 0 0	69 58 0	Wallins Id. S. E. Point.	24 6 0	74 35 W.
HISPANIOLA.			S. W. Part	20 53 0	71 2 0	Gr. Inagua, S. W. Pt.	20 56 30	73 46 W.
Cape Tiberon	18 20 0	74 23 0	Silver Key, S. E. Part	20 13 50	69 35 45	N. E. Point	21 20 10	73 7 W.
Cape Donna Maria	18 37 30	74 18 0	N. E. Part	20 31 0	69 33 0	Little Inagua, E. Pt.	21 29 0	73 2 W.

[4]

R E M A R K.

THE Windward Passages, and French part of St. Domingue was surveyed in 1784 and 1785, by order of the French government, by M. le Comte de Chastenet Puisegur. Since that time I have had opportunities of examining his Survey in its principal points, and have found the latitudes and longitudes correct, except the island Navassa, which appears to be laid down wrong, by a mistake in engraving. He has copied the east end of Jamaica, Morant Keys, Formigos, and the coast about Cumberland Harbor, in the island Cuba, and the rock called Altavella, on the south side St. Domingue, from English and Spanish charts, and has laid down Altavella about 20 miles to the northward of its true position. My reason for making these remarks is because the error in Altavella is of a dangerous nature, and strangers, possessing Mr. Puisegur's charts, may put confidence in them from the authority by which they are published; and, if they do, ships sailing down the south side of St. Domingue, may be led into the Bite, to the north-east of Altavella, which is very dangerous in the night time or thick weather. Mr. Puisegur's sailing directions for the French part of St. Domingue and Windward Passages are

judicious and correct in general. I have therefore inserted them, and have made notes, or amended them where I found it necessary.

The Spanish part of St. Domingue from Isabella Bay on the north side round the east end to Altavella on the south side, is not well known by English or French, therefore ships navigating this coast should keep a good look out.

JOHN LEARD.

London, Nov. 1, 1792.

N. B. The Courses and Bearings are all by Compass.

SAILING

SAILING DIRECTIONS, &c.

SHIPS bound to Jamaica should endeavour to make Altavella, which is a high rock, and is the southernmost part of St. Domingue. It appears something like a bell, or a broken sugar-loaf. There is a channel between it and Beata, and a rock above water, about half a mile to the north-west of it.

North-west from Altavella, distance eight or nine miles, is some rocks above water, called the Frailes; they are bold too.

In order to make Altavella, you should run down in the latitude of 17 degrees 18 minutes, or 17 degrees 20 minutes north *; but if you are obliged to pass it in the night, it is best to keep a little to the southward of this

* Navigators in working for their latitude should always allow the variation or correction of the sun's declination between Greenwich and the place of observation; for by omitting this correction (suppose at Port Royal, Jamaica), there will be a considerable difference between the latitude found in March, and the latitude found in September, though both observations are taken with the same instrument,

this latitude, to avoid an indraught, or current, that sometimes sets strong into the Bay of Neyva.

From

and it is a good one, and at the same place. The following cases will sufficiently prove it:

Port Royal, 24th March, 1792.

In these cases the Sun's declination is corrected for the longitude of Port Royal.

Sun's meridian altitude lower	
limb - - -	73 42 20
Dip for 7 feet the height of the eye on Port Royal beach - Sub.	2 30
	73 39 50
Sun's semidiameter Add.	16
True altitude sun's centre	73 55 50
Zenith distance - -	16 04 10
Declination corrected Add.	1 53 54
Latitude of Port Royal	17 58 04

In these cases the sun's declination is not corrected.

Sun's meridian altitude lower	
limb - - -	73 42 20
Dip for 7 feet the height of the eye on Port Royal beach - Sub.	2 30
	73 39 50
Sun's semidiameter Add.	16
True altitude sun's centre	73 55 50
Zenith distance - -	16 04 10
Declination at Greenwich	1 48 58
Latitude without correction	17 53 08

Port Royal, 18th September, 1792.

Sun's meridian altitude lower	
limb - - -	73 14 15
Dip for 7 feet - Sub.	2 30
	73 11 45
Sun's semidiameter Add.	16
True altitude Sun's centre	73 27 45
Zenith distance -	16 32 15
Sun's declination corrected	1 25 46
Latitude of Port Royal	17 58 01

Sun's meridian altitude lower	
limb - - -	73 14 15
Dip for 7 feet - Sub.	2 30
	73 11 45
Sun's semidiameter Add.	16
True altitude Sun's centre	73 27 45
Zenith distance -	16 32 15
Declination at Greenwich	1 30 42
Latitude without correction	18 02 57
Latitude in March -	17 53 08
Difference in the latitudes	09 49

From these cases it appears that the observations to which the correction is allowed agree within three seconds, but the others do not agree within 9 min. 49 sec. which error is considerable, and the cause is

From Altavella to Point Abacou the course is W. $\frac{1}{4}$ N. distance 42 leagues. Point Abacou and the Isle of Vache is low land: from Altavella to Cape Tiberon the course is W. by N. $\frac{1}{4}$ N. distance 15 leagues.

The land about Cape Tiberon is very high, and often seen at upwards of 20 leagues distance. From Cape Tiberon to the Island Navassa, the course is W. $\frac{1}{4}$ N. distance 11 leagues. Navassa is a small island, of a moderate height, and bold close to it all round. You may anchor under the north-west point, within a quarter or half a mile of the rocks, in from 12 to 17 fathoms, sandy bottom. You will have a great swell with strong sea breezes and very bad landing. Guanias and sea fowl are plenty here. From Cape Tiberon to the east point of Jamaica the course is W. by S. $\frac{1}{4}$ S. distance 34 leagues; and from Navassa, to the east point of Jamaica, the course is S. W. by W. $\frac{1}{4}$ W. distance 23 leagues; and from the Navassa, to the east end of the Formigos, is W. $\frac{1}{4}$ N. distance 13 leagues. It is dangerous to run for the east end of Jamaica in the night, if you have not made the land before night so as to know it: but, if you have made the land, and can bring the fall of the Yallha's

is very plain; for in March the sun is altering its declination at the rate of twenty-three miles and half a day to the northward, which is nearly a mile an hour; and the difference of time between Greenwich and Port Royal is five hours seven minutes, which makes almost five miles difference between the declination at noon at Greenwich on the 24th March, and the declination at noon at Port Royal on the same day; and in September the sun is altering its declination to the southward at the same rate that it did to the northward, and of course the same error will take place as before, but on a contrary way, if the variation is not allowed for. I am of opinion that the omission of this correction has been the cause of the errors in the latitudes in the West Indies and other parts.

Making Jamaica and

Hill, which is the southernmost high land, and is very remarkable, to bear W. $\frac{1}{2}$ N. you may then steer down W. by S. which will carry you three miles or more to the southward of the east end, which is very low and cannot be seen far. Your latitude at noon will be a guide to know whether the land you see is Yallah's Hill; for, when it bears W. $\frac{1}{2}$ N. distance 11 or 12 leagues, you will be in latitude 17 degrees 50 minutes, or 17 degrees 51 minutes. But, if you make the southernmost high land of Jamaica, bearing W. S. W. distance 9 or 10 leagues, and you are bound on the south side of the island, you must then haul up south-west to clear the east point, which you will not see until within four leagues of it. The current frequently sets to the northward round the east end of the island.

If you are bound on the north side of Jamaica, run down in the latitude 18 degrees 12 minutes, or 18 degrees 15 minutes, and you will pass within three or four leagues of Navassa, and steer W. by S. for the north-east end of Jamaica. This course will carry you four leagues to the southward of the Formigos. It is necessary to give them a good birth, for the current frequently sets to the northward, and ships drawing 13 or 14 feet water, will strike on the east end of them. By keeping in the above latitude you will steer direct for the north-east end of Jamaica, which is bold and safe.

Being off the east point of Jamaica, and bound for Port Royal or Kingston, steer down at the distance of three or four miles from the shore until past Morant Bay: for the coast from the East point to Rocky Point has a reef which extends two miles from the shore, to the southward from Rocky Point. Part of this reef generally

nerally breaks, and to the north-west of the reef is good anchorage for droppers. The coast from this point, to the west, continues rocky to the distance of a mile or more from the shore, until you come to the entrance of Port Morant; and from Port Morant, to the westward, to Morant Bay, it is also rocky to the distance of a mile or more from the shore; and from Morant Bay, until you come near the White Horses, the coast is clear. The White Horses are white cliffs, from which there are some rocks at the distance of one-third or half a mile from the shore. Ships have no occasion to run into this bite.

In running down for Yallah's Point, when the White Horses bear north, and Yallah's Point west, you will have soundings, and frequently see the bottom in seven and a half, eight, nine, and ten fathoms; and as you approach Yallah's Point, the water deepens until you lose the bottom. You may approach the point to one quarter or one third of a mile. From Yallah's Point to Cow Bay Point, which is low, the coast is clear. Cow Bay Point is bold too, and the coast all the way to the westward from this point to Plumb Point is bold too.

From Cow Bay Point to Plumb Point the course is W. by N. distance eight miles; but if you are three or four miles or more from Cow Bay Point, you must steer more to the northward. The entrance of the east channel into Port Royal is between Plumb Point (which is the south-east point of the Palisadoes); and the eastern middle grounds, which lie to the S. S. W. from Plumb Point, distance one mile and a quarter; (they break with strong sea breezes). In running for this channel, you should be careful to have your leading mark on by the time you bring Rock Fort to bear N. by E. (and
you

you will soon come upon soundings on the rocky ledge, in seven and a half, eight, or nine fathoms, and then deepen your water). The leading mark is the north part of the Apostle's battery, and the magazine of Fort Charles in a line which leads you near Mid Channel, between Plumb Point and the Eastern Middle Grounds. Steer down with these marks on until you are a-breast of Lime Key; then steer a little to the southward towards Rackham Key, giving Lime Key a good birth, until you open Port Royal Point between Gun Key and Rackham Key; then steer between the two Keys, keeping mid-channel, and immediately after passing the two Keys, steer direct for Port Royal Point, until you bring the fall of Yallah's Hill, on the centre of Gun Key, which will lead you between the Point Knowl, which has but 16 feet on it, and Port Royal Point. This Knowl lays to the southward of the point, and the channel is about a cable's length wide, and is safe. You may approach the extremity of the point within half a cable's length; by sailing close to the point you will also pass between the Harbour Knowl and the point. The Harbour Knowl lays to the westward of the point, about a cable and half distance, and has 19 feet on it. After passing the point, steer to the northward until the Admiral's Penn comes to the northward of Gallows Point. This mark leads you clear of Old Port Royal, and when a-breast of the Dock Yard, anchor, or before if you please. With a land wind or north, the channel between Gun Key and Port Royal is to be preferred (if you can lay through it). The Apostles' battery on the south angle of Fort Charles leads clear of Gun Key Reef.

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Marks for the Shoals in the East Channel.

EASTERN MIDDLE GROUNDS.

To the S. S. W. distance one mile and a quarter from Plumb Point, is the Eastern Middle Grounds, which is in two patches, and rocky bottom; the east patch has 12 feet water on it. Marks, the battery at Fort Henderson a little open to the southward of Fort Charles, and the Admiral's Penn a little open to the westward of Kingston Church, marks for the west patch, which has but 9 feet on it. The battery at Fort Henderson a little open to the southward of Fort Charles, and Mr. Hibbert's house in Liguinea, just coming on the Admiral's Penn. This Patch lays to the W. N. W. of the other, distance about 70 fathoms, and has 10 fathom water between them; these shoals break in strong sea breezes.

LIME KEY.

There is a shoal extends to the northward from Lime Key, a little more than a cable's distance, for which your eye is the best mark, as you generally see it; and to the westward of the Key is another shoal, with 8 and 10 feet on it; the mark for the north end is the Apostle's battery on Rackham Key.

POINT KNOWL.

This Knowl has but 16 feet on it, and is a hard coral bank about twice as big as the hull of a ship, with a good channel all round. The channel between it and Port Royal Point is about a cable's length wide, with
five,

five, six, and seven fathom water in it; and the channel between it and the south channel middle is one third of a mile wide, with from 9 to 12 fathom water. Marks; Port Royal Church Tower on the fourth ambrazure Fort Charles, counting from eastward, and Yallha's Hill on south part of Gun Key. Yallha's Hill on Rackham Key leads to southward of it.

PORT ROYAL POINT.

You may approach Port Royal Point in the west extremity, within one-third of a cable's distance of the beach, and, on the south side, within two-thirds or a cable's length of the beach. The north side of the point is steep too. This point is composed of loose gravel and shingle, and has gained considerably on the sea, and, in all probability, will gain much more, for the sea breezes blow in an oblique direction towards Port Royal, and of course the gravel and shingle is washed or rolled by the sea along the coast until it comes to a point, where it rests. It is probable that the foundation of Old Port Royal was like the extremity of the present point.

SOUNDINGS.

The Soundings between Plumb Point and the Middle Ground is irregular; not less than seven, nor more than 19 or 20 fathoms; and after passing the Middle Grounds, the Soundings are regular in the channel from 19 to 13 or 14 fathoms between Rackham and Gun Keys.

TO PILOT YOUR SHIP TO ANCHORAGE IN CASE OF NECESSITY.

In cases of necessity and want of a Pilot, strangers may safely venture to pilot their ships down to anchorage,

chorage, even supposing they cannot see the marks. For there is nothing to fear on the side of the Palisadoes (which is low and bushy); you must therefore be careful, and keep within half or three quarters of a mile of Plumb Point, and steer down by the Palisadoes until you bring Lime Key to bear S. S. E. or S. E. by S. and anchor in 15, 16, or 17 fathoms near the Middle of the Channel

GOING TO SEA THROUGH THE EAST CHANNEL.

The small craft that are bound to windward from Port Royal generally use the east channel; but it is not to be recommended to square rigged vessels, except they sail well, and you have a strong land breeze, or north, and an appearance of its continuance sufficient to carry you through the channel. And it frequently happens, though there is an appearance of a land breeze sufficient to carry you through this channel, still, by the time you get as far as Plumb Point, the land breeze fails, and you have a long interval of calm, and you meet with a swell right a-head, or a little on the starboard bow; in which case you must take care that the swell does not put you on shore on the Palisadoes.

Marks for the Shoals between Port Royal and Kingston.

PELICAN SPIT.

The deep notch on the North Mountain (which is the notch on the west side of the high part of the Mountain) in a line with the second or third embrasure of the west bastion of Fort Augusta, and St George's Rocks a ship's length open, with Fort Small, and the leading notch for the south channel, which is on the east side of the
above

above Mountain, a little open eastward of the magazine in Fort Augusta.

FIRST BUOY ON SOUTH SIDE OF NARROWS.

The deep notch just open to eastward of Bushy Point of Fort Augusta and Hellshire Point, a small sail's breadth open with Fort Small, St. George's Rocks will be shut in with Fort Small.

SOUTH-EAST BUOY OF NARROWS.

Hellshire Point, a ship's length open with Fort Small and Jones's House, open a little to the southward of a white house that stands on the low land a little way to north-west of Fort Augusta. St. George's Rocks are still shut in with Fort Small. The Channel is not more than 90 fathoms between this and the

NORTH WEST BUOY OF NARROWS.

Hellshire Point, a small sail's breadth open with Fort Small, and Jones's House open a little to the southward of the White House as before.

ELBOW OF KINGSTON HARBOUR SHOAL.

St. George's Rocks, a sail's breadth open with Fort Small, and the fall of Yallah's Hill, a very little to the southward of the highest part of the Palisadoes, or flag staff in Fort Augusta on the lowest part between the first and second sloped hills towards Spanish Town.

ALLIGATOR POND SPIT.

Magazine in Fort Augusta on the centre of the second sloped hill, counting from the southward, and Hellshire Point just open to the eastward of Port Royal Town; and when Fort Small comes open to the eastward of the

the town of Port Royal, you are to the eastward of the shoal.

In going from Port Royal to Kingston, the best time is to weigh with the first of the sea breeze, but not until you see that the breeze has reached the Narrows; for, if you get in the Narrows before the sea breeze blows true, you may be almost certain of getting on shore. Being under way with the sea breeze, the best mark to pass the Pelican Spit is to bring the leading notch a very little to the westward of the Magazine of Fort Augusta; and, after you have passed the Spit (which you will know by the thwart-mark already described in case the buoy or beacon is broke adrift), open the leading notch to the eastward of the Magazine, and when you pass the first buoy on the south side of the Narrows; you must then luff and steer between the buoys or beacons of the Narrows; and after you have passed the Narrows, if the wind is far to the southward, you may luff and bring Greenwich open a point and a half on your lee bow until you bring the fall of Yallah's Hill a very little to the northward of the highest part of Palisadoes, or Merchants careening place. This mark leads clear of the elbow of Kingston Harbour Shoal, and all the way up till a-breast of Kingston. But, if the wind should be easterly, and you can but just lay through the Narrows, and your ship will not lay with her head for Greenwich, in this case, you must not stand farther into Hunt's Bay than to bring the cocoa-nut trees (that is to the westward of Fort Augusta) just in a line with the Fort, and then tack to the southward.

With the common sea breezes your ship will generally lay with her head from the Narrows to Greenwich.

You

You may stand towards Greenwich until the town of Kingston comes nearly shut in with Alligator Pond Point, in five fathoms. The wharfs of Kingston, in a line with the point, leads you in 18 or 19 feet; and, in standing to the southward, you must tack before the fall of Yallah's Hill comes on the highest part of the Palisadoes, or before Jones's House comes on the Bushy Point to northward of Fort Augusta, at which time Jones's House will be a large sail's breadth open to northward of the White House. But, when you are so far to the eastward as to bring Hellshire Point and town of Port Royal in a line, you may then stand to the southward, so as to bring Jones's House nearly in a line with the White House, or the fall of Yallah's Hill, a little to the southward of the highest part of the Palisadoes, and in standing to the northward, towards Alligator Pond Spit, you must tack before the Magazine of Fort Augusta comes on the centre of the second sloped hill as already described; and when above the Spit, you may stand within a cable and a half, or two cables length of the shore, on the Kingston side, all the way to the head of the harbour; and, on the other side, when to the eastward of Kingston, tack before Jones's House comes within a sail's breadth of the White House; but, when you are as high as the Merchant's Careening Place, the coast of the Palisadoes is bold too.

Ships watering at Rock Fort should lay at near three cables distance from the Wharf in order to give them room to get under weigh with the sea breeze, and let go your south-east anchor when the Apostle's battery is about a ship's length or more on the Northern bushy point of the Palisadoes, and with the watchman's house
on

on or a little open to the eastward of the extremity of the Wharf; then veer cable until you come into four and a half, four, or less water, according to the size of the ship, and carry your stream anchor to the westward towards the Apostle's Battery, to prevent the ship's swinging on shore with westerly land breezes; and also carry a small hauler and cadge towards the wharf to haul your boats on board with.

From Rock Fort to Port Royal.

In running down from Rock Fort, when you are a breast of Kingston, you may use either of the two following marks; first, the fall of Yallah's Hill, a little to the northward of the high part of the Palisadoes; and second, the White House in a line with the Bushy Point to northward of Fort Augusta; run down with either of those marks until St. George's Rocks comes in a line with Fort Small, then haul up a little for the Narrows, and bring the flag staff of Fort Augusta on the first sloped hill, (see the plan of Port Royal and Kingston Harbour), this mark leads you into the Narrows; you must haul up as soon as Jones's House comes in a line with the White House. But as you generally run through the Narrows with a sea breeze, your ship sailing fast will hardly give you time to attend to all these marks, and therefore the buoys or beacons * are the principal guide.

* In 1791, Rear Admiral Affleck ordered a piece of timber, coppered, to be drove into the bank, in fourteen feet water, on the south-east or weather side of the Narrows, to serve as a beacon; which was soon after broke by a ship running against it: and shortly afterwards another beacon was drove a little farther on the bank, in twelve feet water;

guide. And after you have entered the Narrows steer direct for the Apostle's Battery, which will lead you close to the S. W. Buoy. And after you pass the Buoy haul up for Fort Small, and bring the leading notch a little to the northward of the Magazine of Fort Augusta (as directed for going up) if the wind will permit you. But if the wind is to the southward, you must take care and avoid the spit that lays off the west end of Fort Augusta; the Saddle Hill, open to the southward of the east part of Fort Augusta, leads but just clear of it: and when the deep notch is a little to the westward of the flag staff of the same Fort, you are a-breast of it. There is another spit between this and Fort Henderson: the Saddle Hill open of the Fort as abovementioned leads clear off this spit above two cables length. When the deep notch is to the westward of the Fort, you may then stand to the westward so far as to bring the Saddle Hill on the Magazine of Fort Augusta. With common sea breezes you can generally keep the Saddle Hill open to the southward of the Fort, in which direction you may stand towards the Apostle's Battery and north part of Green Bay into six or seven fathoms; and in standing towards the Pelican, tack before the Dock Yard flag staff comes on the centre of the mast House.

water; therefore ships should not run close to this beacon, but give it a birth of thirty, forty, or fifty fathoms, according to the size of the ship. A beacon was also placed on the north-west side of the Narrows, on the spit that lays off the west end of Fort Augusta (see the Plan). The look-out house on Saltpan Hill, and this beacon in a line, is an excellent mark to enter the Narrows with when coming from Kingston, and you may steer with them on until Hellshire Point is just shut in or quite shut in with Fort Small, and then haul up, and, if you can, steer direct for Fort Small.

The

The anchorage is good in all parts of Port Royal Harbour; but for ships that are bound to sea, the best anchoring marks are, the leading notch open a little to the eastward of Fort Augusta, and Rackham Key and Port Royal Point in a line, in nine fathoms.

To Sail through the South Channel.

Ships going to sea from Port Royal should get under way with the land wind as soon in the morning as they can see the marks. The general leading mark through the channel is a notch on the east side of the high mountain, called the leading notch, in a line with the Magazine of Fort Augusta; the Magazine is the easternmost building in the Fort. This mark leads clear through the channel for ships of sixteen or seventeen feet water; but with line of battle ships, you should keep the notch a very little to the eastward of the Magazine of Fort Augusta, until Hellshire Hummock comes open with Fort Small. The notch in this direction leads between the South channel, Middle, and its Knowl, which has but 20 feet water on it. This channel is about a cable's length wide, and has 10 fathom water in it; and the notch, a little to the westward of the Magazine, leads to the westward of the Knowl, in 10 fathoms with good room. After you have opened Hellshire Hummock with Fort Small, steer out with the leading notch a little to the eastward of the Magazine, which leads you between Drunken-Man's Key and the South Knowls, which has 23 feet water on them. When Maiden Key is open a ship's length to the southward of Drunken-Man's Key, you are to the southward of those Knowles, and should then bring the leading notch in a direct line with the Magazine, which

will lead you close to the westward of the Little Portuguese, in eight or nine fathom: the leading notch, a very little to the eastward of the magazine, leads on the edge of the Little Portuguese, in twenty-three or twenty-four feet, where there is in general a great swell. When Yallha's Hill comes to the southward of South Key, you are then clear of the Portuguese, and may haul to the south-east, and give South Key a birth of three quarters or one mile; and when Portland makes as an island, open about three quarters or one point with Hellshire, you are then to the southward of the three fathom Bank and Warrior.

It often happens that the land breeze fails before you can get clear of the channel, and sometimes there is a long interval of calm between the land and sea breeze; in this case, you should anchor as soon as the land breeze fails, or you will be in danger of being set by the swell on the three fathom bank, or one bush reef: for by ships not anchoring in time, there has been instances of their slipping or cutting their cables (when the sea breeze has come on) and running into Port Royal to save the ship. The best anchorage is before you get the length of the Little Portuguese, with the leading notch a little open to the eastward of the Magazine of Fort Augusta; and then if the wind comes southerly you can easily return to Port Royal, and, with the common sea breeze, you can go to sea. After you are clear of the channel, if you are bound to leeward, you may steer S. by W. or not farther to the westward than S. by W. $\frac{1}{2}$ W. to avoid some shoal spots that lay to the south-eastward of Wreck Reef. Wreck Reef always breaks; it lays about one mile or a little more to the south-east from Hellshire Point, and is about

one

one mile in length from north-east to south-west. There is a channel for small craft between this Reef and Hellshire Point: There is a shoal spot of three fathoms and a half about a mile to the south-west of Wreck Reef, with seven fathoms round it.

To go through the South Channel with a Sea Breeze.

Men of war, or ships that sail well, may safely go to sea from Port Royal with the sea breeze, if they can lay S. by E. or a little to the eastward of it, observing the aforementioned directions. And after you are through the channel, you will carry soundings of 10 or 11 fathoms, if steering south, or S. by W. until Portland bears W. N. W. and then deepen your water and soon lose the bottom.

Marks for the Shoals in the South Channel.

HARBOUR KNOWL.

The deep notch, on the Mountain, in a line with a large tree that stands a little to the westward of Fort Augusta, and Fort Johnson just touching the cliff of Fort Small, in 20 feet: about a cable's length north from this Knowl, is a shoal spot, of 28 feet, with deep water round it.

SOUTH CHANNEL MIDDLE.

This is a large coral bank, with only 3 feet on it towards the Middle, and often breaks. Marks for the Buoy on the north-west edge, is Port Royal Church Tower, on the fourth embrasure of Fort Charles, counting from the westward; and Hellshire Hummock, on the flag staff of Fort Small. The north and west side

is almost steep too. To the north-west, about one cable's length distance from this buoy, is a small Knowl, called the

SOUTH CHANNEL MIDDLE KNOWL.

It has but 20 feet water on it, and is not much larger than a ship; the shoalest part is very small. Marks: the leading notch on the west edge of the Magazine of Fort Augusta; and the middlemost of three small risings or hummocks on the Hellshire Land, in a line with Fort Small. These risings appear before Hellshire Hummock comes open with Fort Small. The leading notch on the east edge, or a very little open to the eastward of the Magazine of Fort Augusta, leads between this Knowl and the Middle, as before mentioned.

*Shoals to the southward of Middle Ground and
Drunken-Man's Key.*

There are two shoals between this Middle and Drunken-Man's Key, but they are not in your way going through the South channel. From Drunken-man's Key it is shoal to the distance of two cable's length to the north-west, and more than two cable's to the south-west, you must therefore be careful with large ships, and not open the leading notch to the eastward of the magazine but little more than a sail's breadth: on the southernmost part of this shoal the rocks appear above water. Drunken Man's Key is a narrow strip of rock just above water, and has some loose sand thrown on it by the sea; which makes it appear like a sand bank.

To

To the southward of this Key, about half a mile, is a shoal, which breaks with strong sea breezes; there is a channel, with six or seven fathom water between it and Drunken Key Shoal. The same directions should be observed for keeping clear of this shoal, as for Drunken-Key shoal.

LITTLE PORTUGUESE.

This is the southernmost shoal on the east side of the South channel, with from 22 to 26 feet on it; and, in general, a great swell. The leading notch, a little open to the eastward of the Magazine of Fort Augusta leads on it; thwart mark, Yallah's Hill just coming on South Key. When Yallah's Hill is a little open to the southward of South Key, you are clear of this shoal, and may stand to the south-east.

TURTLE HEADS.

The Great Turtle Head is a large bank or reef on the west side of the channel near Fort Small, and always breaks. But the Little Turtle Heads are three dangerous spots, with ten or eleven feet water on the shoalest part of them, and deep water close to them. Marks, the leading notch on the barracks of Fort Augusta, and Port Royal church tower on the south angle of Fort Charles, and the south part of Drunkenman's Key in a line with Yallah's Hill.

THE SOUTH KNOWLS.

These are two small lumps to the S. E. of the Turtle Heads, with twenty-three feet water on them, and lay about seventy fathoms asunder. Marks, the leading

notch on the magazine of Fort Augusta, and Maiden Key a little open to the southward of Drunkenman's Key.

ONE BUSH REEF.

This is a large reef to the S. by W. from the Turtle Heads, and always breaks, and is almost steep too; and between it and Three Fathom Bank is a small bank of three fathom water on it, and ten fathom all round.

THREE FATHOM BANK.

This is a large coral bank with nineteen or twenty feet the least water on it; it breaks with strong sea breezes. Long mark for the east edge, is the leading notch on the west end of the barracks of Fort Augusta; and thwart mark, Hellshire Hummock a little to the southward of St. George's Cliff.

WARRIOR.

This is a small patch to the S. S. E. from the Three Fathom Bank, distance about one-quarter of a mile, with twenty-eight feet water on it. His Majesty's ship Warrior lost her rudder on it in 1782. Marks, a small round hill that stands a little to the westward of the look-out house on Salt Pond Hill, in one with Fort Small; and Portland making an island open about one degree, forty minutes with Hellshire Point.

SAILING THROUGH THE NEW CHANNEL

This channel is to the eastward of the South channel, and nearly parallel to it. It will be preferred to the other channel, when well known, for having smooth water in it until you come to South Key; and in case you are obliged to anchor in it before you come to South Key, the ship will ride easy, with good anchoring ground; and when you are as far in it as Great Bay shoal, you can then go to sea with the sea breeze as far to the southward as south east. This channel leads you half a mile or more to the eastward of the track of the South channel, which is a very great advantage in clearing the three fathom banks.

The leading mark to enter this channel is a remarkable flat, or table hummock, on the mountain to the N. N. W. of Port Royal; it may be known by a small round hummock that stands close to the eastward of it. The middle of the table hummock, or near the west end of it, in a direct line with the White House that stands to the north west of Fort Augusta (and is the same house as used for a mark going to Kingston), this mark leads to the westward of the harbour and Point Knowls; and between the east edge of the South channel middle, and the west edge of Rackham Key Shoal. Steer with these marks on, until a remarkable round hillock, that stands to the westward of Stoney Hill Barracks, comes open to the

* This channel was surveyed and buoyed and first used by order of Rear Admiral Affleck, (by the Author and Mr. Stephen Seymour); and was generally preferred by the King's ships during Rear Admiral Affleck's command.

eastward

eastward of Gun Key ; you may open this hummock a good deal to the eastward of the Key, if you are likely to have the sea breeze immediately, paying attention to the marks for the Great Bay Shoal as hereafter mentioned (and see the plan). After you have opened the hummock to the eastward of Gun Key, then steer away to the southward, keeping them open until a saddle in the mountains to the north west comes in a line with Fort Small ; then bring the aforementioned hummock on the centre or west edge of Gun Key, which mark leads you just to the westward of the shoals on the eastward side of the channel, and about a quarter of a mile to the eastward of the Great Portuguese, and above a mile to the eastward of the three fathom bank ; and as soon as Portland appears an island, you may then haul to eastward, being clear of the reef and shoals of South Key.

Marks for the Shoals in the New Channel.

NAST BUOY OR SOUTH CHANNEL MIDDLE.

Jone's House, open with Fort Henderson, and Hellshire Hummock on the south extremity of Fort Small Cliff ; and the east end of Table Hummock in a line with the White House.

SHOALS TO THE SOUTHWARD OF SOUTH CHANNEL MIDDLE.

The deep notch on the mountain, in a line with the west end of the long Barracks of Fort Augusta, and will be in a line with the extremity of Port Royal Point. This mark leads along the east edge of the shoals to the southward

southward of South channel Middle, and the south east spit of Drunken Key. Deep notch, on the east end of the Barracks lead clear of them.

GREAT BAY SHOAL.

This shoal has a floating beacon on it in 18 feet water, the least water on it is 16 feet. Marks; the leading notch a little to the westward of Gun Key, and Fort Small one fourth on the south end of Drunken Key.

FOUR FATHOM KNOWL.

This Knowl is about one third of a cable in length from north to south, and about a quarter of a cable broad, with not less than 24 feet water on it, and deep water all round. The channel between it and Great Bay Shoal is the widest, and to be preferred, being to the eastward; the channel between it and the shoals to the westward, is near a cable's length wide; but ships of 20 feet water may sail over it, as the water is smooth. Marks; the hummock to the westward of Stoney Hill Barracks, in a line with the centre of Gun Key, leads on the middle of it; and a saddle in the mountain to the north west, open a little to the northward of Fort Small, leads on the south end. The aforementioned hummock, just open to the eastward of Gun Key, leads to the eastward of it; and the hummock just to the westward of the Key, leads to the westward of it.

BETWEEN GREAT BAY SHOAL AND SOUTH KEY BREAKERS

There are two shoals; the northernmost is about half a mile S. by W. from Great Bay Shoal, and a small part of it is even or a little above the surface of the water, with

with deep water close to it. This shoal almost always shews itself by the water breaking a little or rippling on it.

About half way between this shoal and the breakers is the other shoal, the least water on it is 16 feet. Mark for the north west edge of it, is the Magazine of Port Augusta on the west part of Port Royal Wall, and a mountain to the north west, like a turtle's back, in a line with Fort Small.

SOUTH KEY BREAKERS BUOY.

Marks for the west edge of this reef is the Hummock to the westward of Stoney Hill Barracks, on the east edge or just open to the eastward of Gun Key; or the leading notch open a little to the eastward of the easternmost Capiton House. Thwart mark; a saddle in the mountain to the north west and Fort Small in one; or Hellshire Hummock just to the northward of St. George's Cliffs.

EIGHTEEN FEET REEF.

This Reef lays to the southward of the former near half a mile, and has a great swell on it. Marks; the leading notch open a little to the eastward of Capiton House, and Hellshire Hummock on the south part of St. George's Cliffs.

GREAT PORTUGUESE.

This is the southernmost shoal on the west side of the channel. Marks; the leading notch just to the westward of Port Royal town, and Hellshire Hummock on the north part of St. George's Cliffs.

Dircc.

*Directions for sailing into Old Harbour, Long's
Wharf, &c.*

Being clear of the south or new channels, steer to the southward, or S. by W. and give Wreck Reef a birth of two miles; and then edge away and bring the fall of Brazeletto Hill (see the view in the plan) to bear W. $\frac{1}{4}$ N. or W. by N. and steer for it: this will lead you to the southward of the foul ground off the Pelican Keys, and as you approach them you will see Pidgeon Island (which is low and bushy) in a direction with the fall of Brazeletto Hill; keep it so, and pass the Pelican Keys in seven and a half, seven, and six and a half fathoms: and as you steer down with those marks on, you will see a remarkable hummock on the mountain to the northward, called Cudjoe Hill (it is like a jockey's cap). When this hummock comes on the west extremity of the slant fall of Goat Island, and will bear N. $\frac{1}{2}$ W. then haul to the N. W. by N. for Old Harbour. This last mark leads you clear to the westward of Dry Shoal, part of which is even with the surface of the water, and you will see it. You will have from six and a half, to six, or five and a half fathoms; and after you have passed Dry Shoal, continue steering N. W. by N. and you will deepen your water to 8 fathoms.

And as you approach Careening Key, will shoalen it to seven and six fathoms: you must give Carreening Key a birth of near half a mile, to avoid a reef that runs from it to the south-east; and steer direct for the wharfs at Old Harbour, and anchor in four and a half or four fathoms, keeping clear of the reefs on the south side of the Harbour, which generally shews itself.

LONG'S WHARF AND SALT RIVER.

If you are bound to Long's Wharf, in sailing to the northward of Pidgeon Island, there is a small white shoal, of only 18 feet on it; it shoalens gradually on the east end, and bears north from Pidgeon Island, distance one mile. The south edge of Round Hill, just open with Brazeletto Hill, leads on it. You may sail between this shoal and Pidgeon Island in eight, seven, six, or five fathoms; but to the northward is the straightest course. After passing Pidgeon Island steer to the north-west and bring the top house about one third from the north side of the large opening or gap in the mountains (see the view); this mark leads between the reefs to the anchorage at Long's Wharf, in four or three and a half fathoms.

SALT RIVER ANCHORAGE.

If you are bound to Salt River, after passing Pidgeon Island, keep the south part of Brazeletto Hill open a little on your larboard bow, which will lead you close to Salt Island; you may go either to the northward or southward of Salt Island, but the north passage is the best. You may pass within a cable and a half distance of Salt Island on the north and west part; on the south part is a reef, which shows itself, and is steep close to it. There is also a reef extends along on the east side of Long Island, which you see; and also a reef extending from the Salt River shore to the eastward, which sometimes breaks. Therefore steer round the north end of Salt Island, at about two or two cables and a half distance from it, and then steer towards the entrance of
Salt

Salt River until you bring the south edge of Pidgeon Island almost in a line with the south edge of Salt Island; keep them in that direction, and when you are in four and a half, four, or three and a half fathoms, anchor according to the size of your ship. If you are in a low vessel, it will be necessary to go a little up the shrouds to see Pidgeon Island over Salt Island. The south end of Pidgeon Island, a little open to the southward of Salt Island, leads on the edge of the Salt River reef. There is good anchorage under the west part of Salt Island, in five fathoms and a half, good holding ground.

PEAKE BAY.

To sail into this bay, give the reef that runs off Rocky Point a birth of a cable's length or more, and steer towards the north part of the Sandy Beach, and anchor in four and a half, four, or three and a half fathoms, good holding ground. The reef off Rocky Point, and the reef on the south side of the bay, is nearly even with the surface of the water, so that you generally see them. There is a great sea in this bay, with strong sea breezes.

WEST HARBOUR.

The entrance into this harbour is between two coral reefs, that are nearly even with the surface of the water; and the heads of coral frequently shew above water. The channel between the reefs is above half a mile wide, with six and six and a half fathoms in it. There is very good anchorage, with smooth water, just to the westward of the north reef, in five and a half, five, or four fathoms, good holding ground. The land to the westward does not shew any mark that I could find to guide you into
this

this anchorage, but it is not difficult. As you go the westward in the west harbour, the water shoalens to eight or nine feet. It is also shoal on the south side, towards the Mangroves, and smooth water.

GOING TO SEA FROM OLD HARBOUR, LONG'S WHARF, &c.

Ships generally get under way with the land wind, so as to get clear of the reefs near the anchorage, before the sea breeze comes on. Being clear of the reefs, you may turn out with the sea breeze, and may go either side of Pidgeon Island. The channel between Pidgeon Island, and the reef of the Half Moon Keys, is two miles wide, with deep water; but the smoothest water is to the northward of Pidgeon Island. You may stand towards Goat Island and Cabarrita Point by your lead; the soundings are gradual, and tack when you come to five or four and a half fathoms. If the sea breeze should be very strong, you may anchor under dry shoal, and wait for the land wind. But, with moderate sea breezes, any ship may turn out between the keys and reefs. Being as far to the eastward as Dry Shoal, and in standing to the southward, your leading mark for the channel between Bare Bush Key and Morris's Shoal, is Cudjoe Hill, on the slant fall of Goat Island, the same as for Dry Shoal; keep it so until the Half Moon Keys comes in one, then you are to the eastward of Morris's Shoal, and may edge away a little, keeping the Cudjoe Hill about a large sail's breadth on the lower part from the slant of Goat Island, which mark will lead you along the white water on Bare Bush Side to sea. But if in standing to the southward from Dry Shoal, you find that you cannot

weather

weather Morris's * shoal, which you will know by the fall of Cudjoe Hill not being within a sail's breadth of the fall of Goat Island. In this case you must tack to the northward when Bare Bush Key bears E. S. E. or when a saddle hill to the north-west of Pidgeon Island is just coming on the north end of Pidgeon Island. And in standing to the northward tack when the fall of Brazeletto Hill comes on the centre, or near the north end of Pidgeon Island; you may approach the white water on the side of Bare Bush to five fathoms. There is a good channel between Morris's Shoal and the Half Moon Keys, but it is dangerous to approach the latter on the south-east sides, for you will have from six or seven fathoms to 12 feet in one or two casts of the lead. To the E. S. E. and south-east of Bare Bush Key, distance about one mile, is some spots of coral, with from three and a half to five fathoms on them, and seven fathoms close to them. And to the southward and S. S. E. of the Portland Keys, distant about two miles, are some spots of three and a half and four fathoms on them.

* It is said that about thirty years ago ships sailed over this shoal; if so, it must have grown fast, for there is not at present more than nine or ten feet on the north edge of it, and a great swell in general. Marks for the east end of it; Cudjoe Hill about half way from the fall of Goat Island, upon the low bushy land towards the rising to the westward, (this rising is commonly called Little Goat Island); and the Halfmoon Keys about four degrees open, and north part of Barebush Key bearing E. $\frac{1}{4}$ S. Marks for the west end is Cudjoe Hill on the aforementioned rising of Little Goat Island and Barebush Key bearing E. $\frac{1}{4}$ S. It is in length little more than a quarter of a mile, and in breadth about one sixth of a mile, and shoals too sudden for your lead to be a guide in standing towards it.

After you have passed those keys in sailing to the westward, come no nearer Portland than two or two and a half miles, or seven or eight fathoms for the reef off Rocky Point, which is the west part of Portland, extends near two miles from the point to the southward.

CARLISLE OR WITTY WOOD BAY.

This is an open Bay, with winds from west to south east. To sail into the Bay, bring a remarkable round hill to bear north, and steer for it until Rocky Point comes almost on with the east point of Portland, and anchor in four and a half or five fathoms. A little to the westward of this anchorage, is a spot with only three and a half and three and three quarters fathoms on it. The aforementioned Hill bears N. by E. when on it, distance about two miles and a half from the beach, with four and a half and four fathoms within it.

From Carlisle Bay, along the coast to the westward, you will carry four and a half or four fathom water, at the distance of one or one mile and a half from the shore, and three and half and four fathoms between Aligator, Pond Key, and the Main.

And to the westward of this Key the water deepens, and the soundings do not extend so far from the shore as it do to the southward and south-east of the Key; where you will have soundings of from fifteen to twenty-five fathoms, at five or six leagues distance from the land: and as you run to the westward towards Pedro Bluff, the water deepens, and you lose the bottom, except close in shore.

ALIGATORPOND KEY*, PEDRO BAY, AND BLACK RIVER.

This Key is but just above the surface of the water, with a reef all round it. It is about four miles distance from the shore, and you may approach it by the lead, and by seeing the breakers. There is good anchorage for small vessels along shore between it and the main, and in Pedro Bay, which is to the westward of the Bluff, is good anchorage for any vessels, but open to southerly winds; your lead is the best guide when to anchor. The coast to the westward of Pedro is bold too until you come to Paratee Point, off which is a small reef; and to the north-west of this point is Black River, which has not been surveyed. The entrance is between two reefs, and not more than eighteen feet water. The mark to keep without the reefs of Black River, is to keep Pedro Bluff open with Parratee Point.

BLUEFIELDS BAY.

The anchorage in this bay for large ships is without a rocky ledge that runs from Crabpond Point to the west of Bluefields, and joins the reefs of Savanna la Mer.

* In March 1792, his Majesty's ship Brune, in sailing to the westward, passed over a bank of four fathoms and three-quarters, with twelve or thirteen fathoms close to it; the part that they passed over was about two cables length. The bearings taken immediately after they had passed it was, Portland E. $\frac{1}{2}$ N.—The fall of the high land to the westward of Milk River (probably Round Hill) N. E. by N. Pedro Bluff W. by N. and distance from the shore about four leagues. The ship was steering W. by N. and sailing six miles an hour, and twenty minutes after they left the shoal, they saw the breakers of Alligatorpond Key from the deck bearing N. N. W. distance about six miles.

To anchor here with large ships, give Crabpond Point a birth of a mile and a half, and bring the overseer's house at Bluefield's estate open a little to the eastward of the tavern (see the plan), and will then bear N. E. by E. $\frac{1}{2}$ E.. Steer with this mark on, and keep your lead going, and be ready to anchor, as the water shoals pretty sudden; and when you come to nine or eight fathoms, anchor. You may anchor with the overseer's house and tavern in a line, or the overseer's house open to the westward; but the first mentioned is the best. Ships of sixteen or seventeen feet draught of water may sail over the rocky ledge in three fathom and three-quarters, or four fathoms; the mark is the overseer's house just open to the eastward of the tavern; keep them so until you are over the ledge, which you will see by having a sandy bottom, and five and a half or six fathoms; then you may bear away a little, and after running two or three cable's length within the ledge, look for a clear spot to anchor in five and a half or six fathom, with the overseer's house and the tavern in a line, or nearly so. A little to the westward of this anchorage the water shoals on the rocky ledge to three fathom. The watering place is to the northward of the bluff point in the lee side of the bay. You may also water at a stream of Bluefields river near the tavern.

SAVANNA LA MER.

The coast from Bluefields to Savanna la Mer is rocky to the distance of two miles in some places from the shore. The entrance into Savanna la Mer is very narrow, between a small rock called the Middle Ground (on which is only four feet water), and a reef that has seven or eight

eight feet water on it: there is 19 or 20 feet in the channel. The leading mark in is to bring the large Gap at the north end of the Dolphin Head (see the plan), in a line with the large tree on the low land, to the northward of Savanna la Mer, bearing N. $\frac{1}{2}$ W. this mark leads you close to the Middle Ground, which you will see; and after you pass the Middle Ground, haul to the eastward, and anchor in 17, 16, 15 feet water. There is an open and wide channel either to the eastward or westward of Great Reef, which always break. You may stand pretty close to the Breakers of Great Reef, and if you pass to the eastward of it, steer for the town of Savanna la Mer; and you will generally see the reefs as you pass them, and may stand towards the main by your lead. Strangers should not attempt this pilotage. S. E. by E. $\frac{1}{2}$ E. from John's Point, distance three miles and a half, is the extremity of the Coral Bank, on which the Monarch struck in 1782. If you keep half of the high land of South Negril open to the southward of John's Point, you will pass to the southward of this shoal.

FROM JOHN'S POINT TO NEGRIL AND NORTH PEDRO.

The coast to the westward of John's Point to South Negril, is bold too: and between South Negril and North Negril, is Long Bay, with tolerable good anchorage. Close to the southward of North Negril is a small harbour of that name, and has good anchorage for small vessels. And to the northward of North Negril is Orange Bay and Half Moon Bay, places fit for drogers. N. E. about six miles from North Negril, is Green Island Harbour, it is a shallow harbour, and for

which a pilot is necessary. About two miles and a half to the north east, from Green Island is Davis's Cove; it is a small harbour in which two or three ships may lay; the entrance is narrow, with deep water. The coast from Negril to North Pedro is bold too, except at Green Island Harbour; there is a reef runs a little way to the northward from Green Island, which is a low spot and but just above the surface of the water. And from Pedro until you come to Lucca Harbour, you may stand within a mile of the shore.

LUCEA HARBOUR.

This is a very safe harbour, with little danger in failing in or out. To sail into the harbour, bring a remarkable mountain, called the Dolphin Head, open to the westward of Barbara Hill, which has a house on the top of it, and is on the east side of the harbour; it will then bear south a little easterly; steer with the Dolphin Head in this direction, until the fort bears west, you are then to the northward or within the Fort Reef, which generally has a buoy on or near its east edge. After you have passed the Fort Reef, steer towards the town, and anchor in six, five and a half, or five fathoms, muddy bottom; the fort bearing from N. by W. to N. N. W. and Lucca Point from N. by E. to N. E. by N. If you are coming from the eastward it is necessary to keep three or three and a half miles from shore, until you pass Buckner's Reef, which lays off Musquito Cove, and sometimes breaks: and off Lucca Point, to the N. by E. there is a rocky flat extending to the distance of one mile or more from the shore, with four, five, six, and seven fathoms on it. The mark to pass

pass over the west edge of this bank, is Malcolm's House, which stands on a small hill or rising at the east end of the town; bring this house on the east end of the fort, and keeping them so will lead you in eight, seven, and six fathoms, and when you bring the Dolphin Head to the westward of Barbara Hill, as already mentioned; you will deepen the water to 13, and then shoalen as you sail into the harbour. Within Lucea Point, on the east side, is a reef that extends to the distance of a cable's length or little more from the shore; this reef is almost steep too, and sometimes the heads of Coral shew above water: it continues to the northward, and joins the muddy bottom at the Sandy Bay, on the east side of the harbour.

MUSQUITO COVE.

This is an excellent harbour, and secure from all winds; it is capable of holding 100 sail of merchant ships. To sail into this harbour you must go to the eastward of Buckner's Reef. You may sail over the east end of it in five and a half or six fathom water, and then deepen your water. Your course in will be about S. E. by S. (see the plan); but the entrance is too narrow to be attempted by a compass, and it would require a buoy to be placed on the edge of the reef that runs from the east point. The channel at the entrance is little more than half a cable wide, but widens as you go in with from seven to six, five, and four and a half fathoms, muddy bottom.

MONTEGO BAY.

This is a good bay, with the wind from the N. N. E. to the eastward and southward; but is open to the north

and west winds. The north winds are frequent in December and January, and often damage or drive some of the shipping on shore. To sail into the bay, you must not approach within two miles of the north point of the bay, but keep at that distance or more until the church comes in sight, or open to the northward of Frontier Wharf; then you may haul to the S. E. by S. or south east for the shipping. You may approach the reef, which is pretty steep into ten, nine, and eight fathoms, and you will see the bottom. Care must be taken not to anchor until you have well shut in the Sandy Beach (at the north point of the bay), with the old fort point; for with the sandy point just in sight, you will have 30 or 35 fathoms, and the bank so steep that an anchor will not hold there. And if you drive off the bank with a sea breeze you are in danger of getting on shore on the Lee Reefs. The best anchorage mark is the new barracks, that stand on the hill, to the north-east, in a line, or nearly so with Redwick's Stone Wharf, in nine, ten, or eleven fathoms, good holding ground.

MARTHA BRAE.

This is a barr harbour, with 16 or 17 feet in going in; and the passage or channel in coming out between the Triangle Rocks, is not more than 60 feet wide, with six and a half or seven fathom water on it. The channel to the eastward of the Triangle Rocks, between it and the edge of the barr or reef, is 57 feet wide, with five and a half or six fathoms in it; and the east triangle rock is about 15 feet wide, with 13 feet water on it. Therefore if the top of the east triangle rock was removed,

so as to have 20 or 22 feet water on it, there would then be a channel of 132 feet wide: this rock may be blown to pieces by gun powder; it is hollow in several places, and of a soft nature. This harbour would be much improved by building a wall, to serve as a break water on the inner edge of the Lee Reef, which has a good foundation; and also a wall or break water on that part of the weather reef that is nearly dry, and close to the shipping; with those break waters the water would be considerably smoother, and the harbour would hold more shipping, as they would go into less water than they do now without the danger of striking the bottom with a swell.

RIO BUENO AND DRY HARBOUR.

Rio Bueno is an open place, with the wind from north to W. N. W. the anchoring bank is steep; you lay in seven, eight, or nine fathom water, and is a dangerous place in the north season. Dry Harbour is a good harbour for small vessels.

ST. ANN'S BAY.

This is a small harbour, and the entrance is between two reefs that lay east and west of each other; those reefs have three and a half or three fathom water on their edges, and deepens immediately to nine, ten, or eleven fathoms into the channel, which is only 46 fathoms from the edge of the east reef to the edge of the west reef. The marks for going into the harbour is to keep White River Point open to the northward of the east point of St. Ann's Bay, and bring the east part of the barrack gate (see the plan) about the gates breadth open with the west end of the next house below it, and will then bear
N.

N. $\frac{1}{2}$ W. Steer in with the gate in this direction, leads you in Mid Channel; and when the parsonage house (which is to the westward near the water side, and has cocoa nut trees close to it), comes in a line with the wharf to the westward, then anchor in fix and a half or seven fathoms good bottom.

The east edge of the barrack gate in a line with the west end of the house, leads on the edge of the east reef; and the lower window next east of the barrack gate just coming open with the west end of the house, leads on the edge of the west reef. There is a loop hole about half way between the gate and the window, which you will see with a glass. Keep this loop hole just in sight leads in Mid Channel.

Half a cable each way is sufficient to moor with. There is always a strong stream running out of the channel with north winds. This is caused by the great quantity of water that is thrown over the reefs by the swell.

OCHO RIOS BAY.

This is an open anchorage to north and north-west winds. To anchor here, give the reef that extends from the east side of the bay a birth, and haul up and anchor in seven and a half, seven, or six fathoms. There is a reef on the south-west side of the bay, which you see.

ORA CABECA BAY.

This is an open anchorage to north and north-west winds. To anchor here, give the small reef on the east side a birth, and when the westernmost bluff point bears west or W. by N. anchor in five and a half, six, or seven fathoms.

PORT MARIA.

This is an open anchorage, with N. N. E. north and north-west winds. To anchor here, give the north part of Cabaritta Island a birth of two cable's length; and haul into the bay, and anchor in seven or six fathoms, with the north-west point of the island bearing north-east, or N. E. by N. about one or one and a half cable's distance from the Island. The bottom is foul in the outer part of the bay.

ANNOTTA BAY.

This is an open anchorage, with north and north-west winds. To anchor here, give the reef called the School Master's, a birth, which is on the east side of the anchorage; and when the tavern bears S. by W. or south, you must steer for it, and when within the School Master, haul a little to the eastward, and have your anchor clear: and as soon as you come to eight or seven fathoms, anchor within one quarter or one third of a mile of the beach. This is a small bank, and steep too; you should therefore take care and not anchor on the west edge, for your anchor will not hold, and you will be in danger of getting on shore to the westward; but on the bank, which is small, is good holding ground.

PORT ANTONIO.

To sail into the east harbour of Port Antonio with the sea breeze, you may keep close to Folly Point, and bring the church (which is a large square building, and stands on the side of the hill to the southward of the bay) open a little to the westward of the east wharf.

This

This mark will lead you clear into the harbour ; but it is necessary, as you approach the fort, to open the church to the eastward of the wharf ; and when the fort bears north-west, anchor in nine, ten, or eleven fathoms, good holding ground. Red Hazel House (which is on the hill to the eastward of the church), in a line or open to the westward of two large trees that are on the low land, leads clear into the harbour. Red Hazel House, open a little to the eastward of the trees, leads on the reef on the east side of the harbour. The church to the eastward of the fort leads just clear of the reef that extends from the east end of Navy Island. If you are bound into the west harbour, steer in with an easy sail, and keep the church well open to the eastward of the fort ; and as soon as you see Brian's Store (which is a long building on a hill) opening to the southward of Navy Island, (see the plan), bear away and keep it very little open to the southward of the careening point of Navy Island, (this point is low, and is the south point of the island) ; steer with those marks on between Navy Island and the Main, until the church comes open to the westward of the peninsula, then haul round to the south-west and anchor in seven and a half, six, or five fathoms good bottom. The Hog Channel is a crooked and narrow channel, leading from the west harbour to the westward of Navy Island to sea ; it is only fit for small vessels, having but 13 or 14 feet water in the west part of it, and rather difficult pilotage.

FORMIGOS.

This is a large shoal trending E. N. E. and W. S. W. and is 10 miles in length, and near six in breadth ; the east

east end of it bears N. E. by N. from the east part of Jamaica, distance 40 miles, and the west end of it bears N. N. E. from the same point, distance 35 miles. The body of the shoal bears N. E. by E. from the north-east end of Jamaica, distance about 40 miles. The shoalest part is on the east end, and the least water that I found was 18 or 19 feet; but apprehend there are shoaler spots of coral, as there is generally a great swell on the east edge of this shoal, which is almost steep too. A ship of 13, 14, or 15 feet will strike on it. About a mile on it to the westward from the east edge, the water deepens to four and a half or five fathoms; and farther to the westward it is still deeper to five and a half, six, six and a quarter, six and a half, fathoms, where you may anchor. The bottom sandy, with spots of coral. In standing over this shoal, when you come to seven or seven and a half fathoms, you deepen your water immediately to 10, 13, 15, fathoms, and then no bottom at 20 fathoms. The bottom, on the east edge of the shoal, is dark and not plain to be seen in cloudy weather; but the bottom to the westward is lighter, and may be seen at some distance.

MORANT KEYS.

The Morant Keys are four small islands or keys, about six or seven feet above the surface of the sea; they are separately called, the North East Key, the Sand Key, the Bird Key, and the South West Key. The North East Key, Bird Key, and Sand Key, has small bushes on them. A gentleman in St. Thomas in the East very laudably planted some cocoa-nut trees on Bird Key, in order that they may be seen at a greater distance; and it is hoped that the crews of vessels anchoring here will not

not destroy them. You may approach any part of the Morant Keys within two miles and a half. To anchor at those keys, give the North East Key a birth of one and a half or two miles; and when the South West Key bears S. by E. steer direct for it, and you will pass close to the westward of the rocky spitt that extends to the westward from the North East Key, and has but three and a quarter or three and a half fathom on it: and when the North East Key bears E. by N. or E. N. E. you may haul more to the eastward, and anchor with South West Key bearing south or S. by W. and Bird Key S. E. in five, five and a half, or six fathoms, sandy bottom. There are some spots of coral at the bottom, it is therefore necessary to look for a clear anchoring place. The North East Key bears for the East Point of Jamaica S. S. E. distance 33 miles, and from Port Morant S. E. $\frac{1}{2}$ S. 34 miles.

TURNING TO WINDWARD FROM PORT ROYAL.

Being clear of the channels of Port Royal with the sea breeze, it is best to stand to the southward until one or two o'clock, or until you are about six or seven leagues from the land, and tack, and you will generally, with a tolerable sailing ship, fetch to windward of the reefs into some part of Cow Bay; and by the time you get in shore, the wind will in general favour you from the land with smooth water. The coast in Cow Bay is bold too. There is good anchorage to the northward of Cow Bay Point, in seven, eight, or nine fathoms, good bottom, distance about a quarter or one third of a mile from the shore: the point is bold too. You may turn along the coast between this and Yallah's Bay, within three quarters of a mile of the beach: the anchorages in
Yallah's

Yallha's Bay is only fit for droppers; and between Yallha's Bay and Yallha's Point the beach is bold too. To the northward of the point is tolerable good anchorage, with sea breezes called Saltpond Bay. To anchor here give Yallha's Point a birth of one third of a mile; and you will have nine, eight, seven, or six fathoms; and steer in by your lead and anchor, the point bearing S. E. by S. distance about one third of a mile from the beach. In turning from this point you may stand towards the main into seven or six fathoms (giving the White Horses a birth of half a mile); until you come to Morant Bay.

MORANT BAY.

There is a great swell in this bay, with southerly winds, for the reef under which you anchor (and always breaks) is not of sufficient extent to break the sea off, and a great swell comes into the eastward and westward of the reef. To anchor here keep the White Horses well open with Belvidere Point; and when the town bears north, haul round the reef, giving the breakers a birth of about two cable's length, and anchor between the reef and the town in six and a half, six, five, or four and a half fathoms; with the White Horses shut in with Belvidere Point. There is a wide passage for droppers to the eastward of the reef, with 13 or 14 feet water.

FROM MORANT BAY TO FISHERMAN'S BAY.

The coast is rocky to the distance of two miles from the shore, with passages for boats between the reefs, until you come to Fisherman's Bay, which is a small harbour with a narrow entrance; there is room for two ships to

lay

lay in this harbour, moored at head and stern, in five or six fathom water; but the channel should be buoyed before you attempt to go in. From the east part of Fisherman's Bay point to the eastward towards Port Morant, it is rocky to the distance of one mile or more from the shore.

PORT MORANT.

This is a good harbour, secured from all winds; the entrance between the reefs is only 165 fathom wide. To sail into this harbour with the sea breeze, it is necessary that your ship should lay north, or N. by E. and as the reefs extend to the distance of a mile from the shore on each side of the entrance, you must therefore keep without that distance until you bring the leading mark on, which is Kelly's house (see the view), on the east corner of the easternmost red cliff, and will bear N. & W. this mark leads clear into the harbour. Steer in this direction until Perro Mill is shut in behind Bowden hill, then run about half a cable's length farther to the northward, and anchor. In case the wind is scant, and you cannot lay higher than N. by W. you may borrow (with a ship of fourteen feet draught of water) on the south part of the weather reef, with Kelly's house a little open to the eastward of the Red Cliff; but must bring the house and east end of the cliff in a line by the time you are as far in as to bring the little islands to the eastward in a line with the point. But if at the time you get this far, you find that you cannot keep Kelly's house to the eastward of the fort (which appears like a wall on the same Red Cliff,) you must then luff round, and anchor, and you will have room to bring up clear of
the

the lee reef, with one third or half cable, and must warp in. Kelly's house on the west end of the fort, leads on the edge of the Lee Reef. But if you can keep Kelly's house to the eastward of the fort, until Perro Mill comes within a sail's breadth or more to the southward of Perro battery; you may then anchor, being within the Lee Reef, and between it and the Harbour Shoal, which has but ten or eleven feet on some part of it. Kelly's house on the east edge of the fort on the Red Cliff, leads just on the east edge of this shoal; and Perro Mill and the fall of Bowden Hill in a line, is a mark for the north edge of the Harbour Shoal. To sail out of Port Morant, use the same marks as coming in.

TURNING PORT MORANT.

In standing to the south-east you must attend to the Morant Keys, but it is not necessary to go near them, unless you wish to anchor there, as there is good seven leagues turning room between Jamaica and the Morant Keys. You may stand within two miles and a half of the shore, between Port Morant and Rocky Point; but off Rocky Point not nearer than three miles: and to the eastward of this point, the reef runs in a direction towards the south-east point of the island, with boat channels through it, and smooth water within it.

This reef extends to the distance of near two miles from the shore at some places to the eastward of Rocky Point. But between the south-east or folly point, and the east point, it do not extend more than half a mile from the shore.

D *Ships*

Ships bound to windward will of course take the advantages of flants of wind; and as the wind is often as far to the southward as E. S. E. you will, with a tolerable sailing ship, in standing to the north-east, fetch the middle or the east part of the Formigos, and if you should have passed at the distance of four or five miles to the eastward of the east point of Jamaica, and there should be a little weather current, which is often the case, you will then weather the Formigos; but you should not approach them in the night, for the east end of them is very dangerous. It has been observed by many experienced persons, that the current generally sets to the eastward or N. E. between the east point of Jamaica in the track of Navassa, and the west end of St. Domingue; and to the northward or southward of this tract the current has not been perceived. And as you approach the island Navassa, which is bold too, you will frequently meet with light unsteady winds, and a weather current; but as you get to the north-east of Cape Donna Maria, you commonly lose the current, and by keeping in shore will meet with land breezes at night, and sometimes much lightning, thunder, and rain.

You may approach the coast of St. Domingue between Cape Donna Maria until you come near the Caymites, within two miles of the shore, and also at the west end of the island Gonave, within one mile of the shore. The course from Cape Donna Maria to Cape Nicholas, is N. E. by N. distance thirty leagues; but if you are three, four, or five leagues from Cape Donna Maria, you should steer N. E. or N. E. by E. or farther to the eastward, if the wind will permit; for as you approach Cape Nicolas, you will frequently meet with the wind
from

from E. N. E. or east, and at night variable winds from the land. The coast about Cape Nicolas is bold too, and frequently a weather current setting round the point of the Mole.

For a description of the Coast of St. Domingue, &c. see the following Directions by Mr. de Chastenet Pui-segur.

DIRECTIONS

FOR THE

COASTS AND CHANNELS

OFF AND NEAR THE

ISLAND of St. DOMINGO:

By M. DE CHASTENET PUYSEGUR.

Note. All the courses and bearings are by compass except those in *Italics*, which are true bearings. The variations in all the navigation hereinafter described is nearest half a point east.

TO SAIL DOWN THE NORTH SIDE OF ST. DOMINGO.

SHIPS coming from any place to windward should, previous to their making the island, run down between the latitudes of nineteen degrees 20 minutes, and nineteen degrees 50 minutes, taking particular care never to go to the northward or southward of those latitudes; this

observed will keep them clear of the Silver Keys, and out of the currant of Samana Bay. They will make the land either by Cape Cabron, or near Old Cape Francois.

Cape Samana is of a middling height, and rather steep at its pitch, you see it at the time you make Cape Cabron, it bears from it nearly south-east distant three leagues.

Cape Cabron is higher and more steep than Cape Samana, it is well covered with large trees, and the appearance of it is very green: from Cape Cabron to Old Cape Francois, the coast forms a deep bay generally called Scot's bay, it is covered by a reef close to which there is a great depth of water. The shore is low and not seen at any distance. You must avoid getting into the bay, by steering for the Old Cape which bears from Cape Cabron W. N. W. $\frac{1}{4}$ W. and is distant 15 leagues.

The point of the Old Cape is low, and runs out in the form of the snout of a porpoise, in a clear day, when at five or six leagues distance N. N. W. of Cape Cabron, it makes like an island: each end appearing gradually to slope into the sea. When you have run so far as to bring Cape Cabron four or five leagues to the south-eastward of you, you must steer for thirteen or fourteen leagues N. W. $\frac{1}{4}$ W. will pass five leagues to the northward of the Old Cape, then steer W. by N. when having run fifteen leagues, you will see Point Casrouge about three leagues distance from you: continue on for five leagues; when Isabella Point will bear S. W. $\frac{1}{4}$ W. distant four leagues; after having got thus far you have nothing to fear, and if it was necessary you might keep within half a league of the shore.

When

When you are about four leagues off, to the northward of Old Cape Francois, it appears like a porpoise nose projecting to the eastward, and three leagues further west is a point very much resembling it projecting to the westward: It is known by the name of Cape la Roche. The coast bears between them west five degrees north, and east five degrees south, is low, rather steep close to the sea side, and is covered with trees remarkably green. Toward the point of the Old Cape is a mountain, which is in clear weather seen at fifteen leagues distance, and is a good mark to point it out.

From Cape la Roche, the land trenches in for two leagues, and forms rather a deep bay, sheltered by reefs. The coast runs along the west for some distance, and after trenches a little to the northward, rising in height till you come to the point Mascoury, which bears $W. \frac{1}{2} N.$ from Cape la Roche, it is rather high and the shore is bold. It serves to point out the small harbour of St. Jago, which is three leagues distant from Port Plate.

Port Plate is thirteen leagues distant from the point of the Old Cape, and bears from it $W.$ by $N.$ It is known by a mountain which is some distance in land, and appears to be * isolated not unlike the Grange. The anchorage is good, and the entrance nearly covered with Mangrove Islands, which you run along, leaving them on the larboard hand: when you are within these islands you anchor in from 17 to 20 fathoms on a good bottom.

* Isolated is I believe not properly an English word: but I do not know any so proper for the present meaning. In French architecture it signifies any thing standing by itself.

In approaching the coast you see in the west a very high and steep cape which is Point Casrouge; it is easily known by its size.

The coast from Port Plate to Point Casrouge is covered with reefs close to the shore, and does not admit of any anchorage.

The Old Cape and the great point of Casrouge bear from each other W. by N. and E. by S. sixteen leagues. If you are three leagues north of Casrouge you see a low point running out to the westward, which has the appearance of being detached from the coast like an island: it is Isabella Point, the northernmost part of the island of St. Domingo; it bears from the great Casrouge W. by N. and is distant seven leagues; between these two points is a deep inlet called Port Cavaille.

On the east side of Isabella Point is an anchorage for vessels drawing twelve or thirteen feet, sheltered by a reef: it is very easy to enter, and the only direction necessary is to run along the reef till you see the entrance.

On the west side of Isabella Point is a more extensive anchorage, and more easy to take: but the ground in many places is foul; there is from 5 to 7 fathoms water.

From Isabella Point to the Grange is ten leagues; they bear from each other west ten degrees south, and east ten degrees north.

Supposing we have now Isabella Point bearing S. W. distant two leagues, and wish to proceed, if we would pass outside a shoal which lies off the Grange (and called in the French Chart Haut fond de la Grange), you must
steer

steer a few degrees to the northward of west, for twelve leagues, when this shoal will bear about south, and will be distant two leagues: but if you would pass in the Mid Channel between it and the Grange, you must steer W. by S. $\frac{1}{2}$ S. and having run twelve leagues it will be to the northward of you about a league.

West of Isabella Point is Point la Roche, or Rocky Point, to the westward of which is an anchorage for large ships: but ought only to be used as such in case of necessity, as the anchorage is very bad. To gain this anchorage you must haul very close to Point la Roche, and anchor as soon as you are in 12 fathoms white bottom. This anchorage, which is sheltered by the reefs that are N. N. W. of Point Roche, is three leagues distant from Isabella Point.

The Grange Point is known by the mountain from which it takes its name, and is seen at a great distance, before you see the coasts. This mountain is isolated, and stands upon a low peninsula; it has very much the appearance of the roof of a barn, or house, from which it takes its name Grange, signifying a barn. The north-west part of it is bold; you may come within a mile, or even less of it. On the N. N. E. part of it lies the Haut fond, two leagues distance; it is a white shoal of not more than two cables extent each way. There is a small spot on the shoal with only 25 feet water; the Ville de Paris struck on it in the year 1781. Close to it is 6 fathoms, then 10 and 15, and you will suddenly lose the bottom. The White Bottom has generally rocks, so it cannot be positively said whether there may not be some spots on it even with less than 25 feet. When you

are

are on this shoal the Grange bears *south* twenty degrees west; you will then have the islands of Monte Christ open one with the other, the westernmost of them bearing *south* thirty degrees west; there is an anchorage under the Grange; you must range along the little island of Monte Christ, and let go your anchor as soon as you have 6 fathoms, under the south side of the westernmost of the Monte Christ Islands. From the Grange you see the mountains to leeward of Cape Francois.

To avoid a small island of sand which is one of the Seven Brothers, when you are two leagues to the northward of the Grange, steer west, or west and by south for three or four leagues; when you may haul up half a point more to the southward, till you see the mountain of Picolet, which, when you do steer for it, they bear from each other east fifteen degrees *north*, and west fifteen degrees *south*.

West of the Grange are the Seven Brothers, which are low islands, and most of them covered with mangroves. There is a channel between them and the coast of St. Domingue, which vessels sometimes use going to Manchineel Bay, but it is very shoal and narrow; *there* are channels between the islands, but the ground is very irregular and dangerous.

If you want to go into Manchineel Bay, you must, supposing you are one league to the northward of the Grange, steer west seven degrees south; as soon as you have doubled the westernmost island, which has a white shoal running off half a league from the W. N. W. part of it, you will see Point Icague, which is a low point covered

covered with trees, and which forms the entrance of Manchineel Bay. You must run close to the shoal off the island of sand before spoke of; there is not less than 6 fathoms water near its edge. You must then haul up and run about half a league from the island for League Point, so as to pass pretty close to it; you then anchor in from 8 to 10 fathoms; the ground in the bay is good and clean.

From Manchineel Bay to Fort Dauphin Bay, is two leagues S. W. $\frac{1}{4}$ W. The coast is clear, and you see the white bottom very plain. From Fort Dauphin to the Cape the bottom is exceedingly white, but the coast is surrounded by a reef, at the foot of which is a great depth of water.

This reef has many passages through it, so as to admit ships to come in and anchor in the white bottom, but there are so many rocks and shoals that it is deemed impossible to come in without a pilot of the place, as no description can sufficiently point them out.

Caracol Passage is the least difficult; the passage is wide, and the losing the white bottom shews it plain enough; but no vessels drawing more than fourteen feet water ought to attempt it. If you do go in, you must anchor as soon as you are within the reef, as the water shoals very quick in shore.

The town of Cape Francois* is under Picolet Mountain; there is no danger running in for Picolet Point, if

* To sail into the harbour bring Point Picolet to bear S. by W. $\frac{1}{4}$ W. and steer S. $\frac{3}{4}$ W. and you will see right a-head a remarkable mountain,

if you keep it bearing from S. S. W. to S. S. E. If you cannot wait for a pilot you must range along Picolet Point, having it about south or S. S. W. at about the distance of a short musquet shot: you will then see a white flag placed on the north part of a reef. Steer S. E. or S. E. $\frac{1}{4}$ E. so as to leave the white flag on your left hand; you must take care to have a sufficient quantity of sail out, as you will be forced to haul up to weather a red flag which you leave on the starboard hand, about half a cable distant; when you may steer for the middle of the town, and anchor where you please.

From Picolet Point to Honorat, which is a league and a half to the westward, there is no place of shelter. Point Honorat forms the entrance of Port Francois; there is a reef runs from it to the west 100 fathoms out, at the end of which is 3 fathoms. To anchor, you

tain, called Bishop's Cap; it appears in three points: bring this mountain in a line with a remarkable hillock, that stands by the water side in the harbour, and has a house on the top, and will bear S. by W. Steer in this direction, will lead you to the westward of the outer reef called La Coque Vielle, which generally breaks, and has a buoy with a white flag on it; continue in this direction (leaving the buoy about thirty yards on the larboard hand), until you open a small rock (that stands detached a little from Picolet Point) with the said point, then haul to the S. E. or S. E. by S. keeping the rock just open, leads between the Coque Vielle and Grand Mountain Bank, that has a red flag on the east edge, which you leave on the starboard hand: and the Petit Mouton that always break, and the Trompeuse Shoal which has a white flag on it, you leave on the larboard hand. You must therefore steer round the Grand Mouton Bank, giving the red flag a birth of about half or two thirds of a cable's length; and, when you have passed it, steer for the town, and anchor in 8 or 9 fathoms, good bottom.

pass

pass this point, then steer S. S. E. till you have run two cable's distance, and you will anchor in 8 or 10 fathoms in an oozy sand; the fort will bear of you E. S. E. and you will be distant from the shore a cable and a half. This harbour is very small, there is not more than 400 fathoms from the north to the south points; the bottom is good, and it is a convenient harbour should a gale of wind prevent your getting into Cape Francois; or for a shelter for frigates, should a superior force make it necessary.

There are reefs off the south point which extend as far as the Bay of Acul, without leaving any practicable passage. The Bay of Acul is very extensive; it is sheltered in the north and N. N. E. part by Rat Island, an island of sand, which are the finish to the reefs extending from Port Francois. The N. N. W. part of the bay is sheltered by breakers, and several shoals through which there are passages, but very difficult and narrow.

The Island of Rats is one league and two miles from Port Francois, bearing west two degrees south; in leaving Fort Francois to go to the Bay of Acul, you must get to the northward, to double a white shoal on which there is, in some places, but 4 fathoms. Coming from the northward, or the eastward, you must stand in for Rat Island, or the Island of Sand, steering about S. S. W. When you get within a league of the Island of Sand you will plainly see the Point of Trois Maries, and soon after in the inside of the Bay, a low point with a large tuft of trees on it, called Point Abely. You must keep the small island of the Trois Maries, which are near the large point of that name, in one with the

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the tust of trees, sounding all the time, and steering to starboard or Port; should the water shoal on either side, you have 10 fathoms in the middle of the channel, which is not more than a cable across: you have on each side the channel a white shoal, on which you will not have less than 4 fathoms, without you run too far on. It is recommended, if possible, not to go in it at all.

Having run two cables' length in this channel it widens: when you bring the Island of Sand (which you leave on the larboard hand) *E. by S.* you might, if it was necessary, range close to the western reef, at the point of which is 16 fathoms. You continue to run on for the Point of Trois Maries till you bring Rat Island, which you have left on the starboard hand, to bear *N. W.* when you may anchor in 14 or 18 fathoms water; all the shoals shew themselves very plain.

The Middle Channel or Rat Island Channel, appears to be more narrow than the Island of Sand Passage, when, in reality, it is not; for you have 10 or 12 fathoms water close to the reef, which shews very plain: to enter by it you must bring Rat Island to bear *south*, or *south by east*, you will, in time, see the Point of Trois Maries, which you must open to the westward of Rat Island; sounding all the while, never coming on less than 9 fathoms; when you are at a quarter of a league distance from Rat Island you must steer *S. E.* to pass, at a cable's distance, two reefs on your left-hand, which you ought to range as close to as possible to avoid one which lies off the east end of Rat Island, and which you must leave on your starboard hand; having run *S. E.* two cables' length, you are inside, when you may steer
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for Trois Maries Point. If you want to get out by this passage, as soon as you have doubled the reef of Rat Island, and are in the channel, steer between Point Du Limbe and the Island of Tortuga till you have brought Rat Island open in the east of Trois Maries its own length, then steer N. W. you will not have less than 9 fathoms, and often 15 or 16. This passage is shorter and better than the first; besides, if you should be taken a-back, the ground is good, and you may anchor.

The third passage, or Du Limbe Passage, is the best of all, and so large, that ships may turn up it; it is between the island of St. Domingue and the Breakers, which are west of Rat Island; which extend to within half a league of Point D'Icague; to enter by it you run for the Island Du Limbe till you bring D'Icague Point to bear south; it is known by the steep rocks which form it, and it is the only high point which shews between it and Du Limbe. Steer *south* till you see a shoal which lies to the eastward of Port D'Icague, it is called Coquevielle, at the foot of which is 5 fathoms; steer in the Mid Channel between it and Point D'Icague, which will be a S. E. course, you will have from 10 to 15 fathoms water; afterwards you may, if you want to anchor to the westward of Trois Maries, steer for the Morne Rouge, or Red Mountain: you may anchor any where between it and Trois Maries, in from 12 to 13 fathoms. If you are turning through this passage you need not be afraid of coming near the rocks or the coast side, you may go within a cable's length of any thing you see. Off the low point of the Great Boucan is some breakers which always shew; there are 8 or 10 fathoms

thorns close to it: when you get it by compass to bear S. S. W. you are inside, and may anchor where you will. If you would wish to go further up the Bay, after having passed Trois Maries, steer for the Morne Rouge, and pass it within half a cable; there is a shoal lies between it and Point Abely (which is opposite to it): as soon as you have passed Morne Rouge you will see Lombard Bay; you may anchor as near the shore as you judge necessary, in 7 fathoms oozy bottom. There is a very small shoal half a mile S. S. W. of the Trois Maries Rocks, so small as to render it difficult to be found: it is easily avoided if you are on that side the Bay, by standing over towards Abely into the middle of the road, and then steer for Morne Rouge.

This Bay is an excellent retreat in time of war for frigates; or, indeed, for line of battle ships to water; watering ships is attended with some difficulty; the water is good, and is close to on the north side of the Morne Rouge; it might, without much trouble, be made a very good watering place. You must not go higher up the Bay than Lombard Bay, as there are several dangerous shoals which rise very suddenly.

From the bay of Acul the coast runs W. N. W. to the island of Du Limbe. Some little distance further is the island of Margot, which is of use in pointing out Chouchoux Bay. It is of a round figure; the bay is two miles to the westward of it. And four leagues from Morne Diable, which is at the entrance of Port Francis, and six leagues *west eight degrees north* of Picolet. The bottom is good, there is from 6 to 7 fathoms: to enter you must pass very close to the eastern point (there
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is 6 fathoms touching the shore); it is generally calm, or an eddy wind from the land in the bay, however strong the sea breeze may be without. A frigate may anchor in 5 fathoms water to the westward of two small houses which you will see in doubling the eastern point; you may know the bay independent of Margot, by a large white streak which runs down a hill half a mile west of the entrance. West of Chouchoux Bay is a very small bay called la Riviere Salée, or Salt River, but it can only be used by small vessels.

From Chouchoux Bay the coast runs west twenty-eight degrees north for a league, and when you come to a bay called Le Fond de la Grange, which is to the eastward of Point Palmiste, and known by a chain of rocks which extend near a league almost to the great point of Icague. The bay is small, though the ground is very good: it is not so well sheltered as Chouchoux. To enter you keep the east point on board, and anchor in 7 fathoms, in the middle of the bay; the bottom is an oozy sand.

At a short league from the bay is Icague Point, which is enlarged and formed by several other points. You must not come near the land to the eastward of this point for the rocks already mentioned; some of which are entirely under water, and run out from the shore half a league.

From Point Palmiste the coast runs W. $\frac{1}{2}$ N. to the point of the carenage of Port Paix, which is the northernmost point of this part of the coast. It is distant from Palmiste 4 leagues, and is often at a distance taken for it; the coast between the two points is safe.

The channel of the island of Fortuga, begins at

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Point

Point Palmiste; it is narrowest at the Carenage point: it is very safe, and ships may turn up, which is in general considered as a great advantage when the current runs up. The island is of a moderate height; it is six leagues long and one broad; all the north side is ironbound and steep too.

South of the west point is a sand bay, where there is good anchorage; the south side is almost every where covered with shoals surrounded by reefs. There is an anchorage opposite to some barracks in the middle of the island, called La Vellé. The only good anchorage which must be for ships, drawing from 14 to 16 feet water, is Basse Terre; it is within the reef one league and a half from the east point; the passage is narrow, but easy to take. You must keep the weather reef on board of course, leaving them in the starboard hand, and steer N. N. W. and N. to double the reef, you leave on the larboard hand; do not be afraid of coming near the land; anchor as soon as you have brought the lee reef to bear S. W. Large ships may anchor outside the reef upon white bottom, a mile to leeward of Basse Terre.

To the eastward of Basse Terre, towards Portugal Point, there are several bays which boats or schooners may anchor in, but nothing larger.

This channel, opposite the east end, is two leagues and a quarter across. Opposite the point of the Carenage it is but two leagues; a little further it widens to two and a half or three leagues; ships turning up should stand as close as possible to both shores, as the wind and current always favour you most in shore. You may stand safely within a mile; all the dangers are visible.

visible. As there are several bays on each side, the current does not run in the same direction; and you will sometimes see it run a hundred different ways. There are times when the current in the middle of the channel runs contrary to those in shore. Should there be a lee current, which is very seldom the case, and never but in the summer time, it would be folly to attempt the passage. Ships should then stand six or seven leagues to the north of Tortuga, and they will work up very easy.

Two miles from Point Carenage is the fort of Port Paix, off which is a shoal of a cable's length; there is 13 fathoms close to it. The anchorage off Port Paix is of some extent: though the bay is very small, you may anchor off the north part of the town in 12 or 13 fathoms, oozy sand, about a cable and a half from the shore: from thence the coast runs nearly in a right line to Mouftique Bay, which is four leagues to the westward: it is an iron-bound shore, and very safe, the water being deep close too.

Mouftique Bay is very small, though it might serve for a ship in distress: there is a battery on the eastern point, which you pass, leaving it on the larboard hand: as soon as you have doubled it let go your anchor in 12 or 15 fathoms, a cable and a half from the shore. Some part of the bay the ground is uneven and rocky, though, in other parts, it is good. You must mind not to let go your anchor till you have sounded, as at the entrance of the bay there is no bottom with 40 fathoms of line. You must at least bring the battery to bear N. N. E. Off the west point is a shoal, which runs in the bay a cable's length.

Port Al'ecu is a league and a half to the west of Mouf-

rique : the shore between them rocky ; deep water close to it. The anchorage is better, but not so easy for large ships to take as Mouftique Bay, as there is a reef and a shoal, with only 3 fathoms water, runs off the east point for two cables length, and which rounds the point to within the bay. To anchor, you must give this shoal off the east point a small birth on your larboard hand, when you must haul your wind, ranging along the eastern reef, anchor towards the middle of the bay, having the house bear about S. S. W. you will be in from 8 to 10 fathoms, oozy bottom. You may go nearer in towards the house, in the cod of the bay, as near as 4 fathoms ; the south-west shore is safe. You may stand close into the white bottom, which is close to the shore.

From the Port Al'ecu the coast runs west five degrees north for two leagues and a half to Point du petit Jean Rabel: two miles more to the eastward is the point of Jean Rabel, which forms the anchorage of that name. It is very easy to take, but you must not be afraid of going near the eastern reef, at the foot of which is ten fathoms. The anchorage for large ships is two cables length from the eastern breakers: you must take care not to shut in the two points on that side. You will anchor in 15 fathoms. You may go further in (as far as 8 fathoms) but it is not safe as the water shoals very quick, and the ground is not so clean inside. The Debarcadaire, or landing place, is a very good one, even if there should be a swell; it is under the fort, which is exceedingly well placed, and makes it a very good retreat from an enemy. The anchorage is accounted good, the ground holds well; the only winds to fear are north or north-west.

From

If you are north-west of Jean Rabel, at a short league's distance from the land, and have half the island of Tortuga open with the point, you will have 60 fathoms water, oozy bottom; a little further out eighty fathoms.

From Jean Rabel the coast forms a great bight in the south, as far as the peninsula of St. Nicholas, which is four leagues and a mile W. S. W. of it. All the coast between is rocky, and it does not offer any shelter for vessels. The currents here are very sensible near the shore, and generally set on it two leagues; in the offing, they are less so, and set to the north-east; in approaching the peninsula they are much stronger, and run to the north.

The west point of this peninsula forms the north part of the entrance of St. Nicholas Mole. The bay is large and spacious at the entrance, but narrows towards the town, which you see as soon as you have doubled the Cape. You may stand very close to both shores: but it is recommended, on the south side, to allow some room for wearing, as there is no anchoring ground, which there is on the north side, though very close to the shore. You anchor before the town and under the barracks. You will be in 15 or 18 fathoms, sandy bottom. In going in you must be prepared for the puffs or squalls which come down from the land, sometimes so violent as to endanger your masts.

In going out of St. Nicholas you see in the south point of the Mole which forms the entrance, and two miles to the southward of it is False Cape: it is at the western extremity of a large point which rounds in, in the S. S. E. for two leagues and one third (as far as Point Perles).

False Cape is easily known by a small rock which is at its extremity; it is steep, and forms no shelter, it is generally a calm here. The currents in shore run to northward, but two leagues in the offing west, and W. S. W.

From Point Perle the coast runs south-east for a league, and after E. S. E. to the point of the platform, which is three leagues and a half further. This point is easily known, as well from its flat form, as that it is the southernmost point of this part of the island: the anchorage is before a small sand bay, at the bottom of which are some houses. You anchor near the shore in 8 or 10 fathoms, weedy bottom.

From the point of the platform to Point la Pierre, which is at the west entrance of Gonaive, the coast trenches in for two leagues to the north, and forms around to Port à Piment: from whence it runs to the south and joins Point la Pierre.

This point is rather high and steep; it bears with the point of the Platform *east* eighteen degrees *south*, and *west* eighteen degrees *north*, distant ten leagues and a half.

All this coast is safe and bold: there is an anchorage even for large ships at the Bay D'Hène, and at Port Piment; but these anchorages ought not to be used but in case of necessity. In the hurricane months there is a gale of wind almost every night, some of which are violent, coming from the south-east: it is therefore recommended, without you have business on this part of the coast, to keep off two or three leagues, so that you may, with any wind, keep to the westward.

The Bay of Gonaives is very large and fine, the anchorage excellent, and the entrance very easy. You range

range along the north shore half a league or two miles distance, steering a few degrees to the northward of east. You let go your anchor in 6 or 10 fathoms, oozy ground. You will find from the entrance under the Point of Gonaive, which is low and one mile east of Point Pierre, 15 and 12 fathoms; the water diminishes as you get into the Bay. When you are a good half league from the land, and two miles from the Debarcadaire, you will have 6 fathoms. After having doubled Gonaive Point, leaving it on your left hand, you will see Fort Castries on a point of land, which you must not approach too near, as there is a *Caye*, i. e. Key, lies a mile south of the point.

From Point la Pierre to Cape St. Marc is eight leagues. They bear from each other *S. by W. and N. by E.* which is likewise the direction of the coast. One league north of the Bay of St. Marc is a low point, which appears at a distance like an island; it forms a cape, which runs out a mile west of the bearings given above; is called la Pointe Du Morne au Diable, and serves to shew the mouth of the River Artibonite, which falls into the sea two miles to the north of the point. There is an anchorage the whole length of the coast for small vessels only. Cape St. Marc is high, and of a round form: you see at a great distance a mountain which forms it, and is a mile from the sea side.

The opening of the bay of Saint Marc is north of the Cape, it is a deep inlet (a league); the water in it is a great depth. Ships anchor in the bottom of the bay under the town, in 15 or 18 fathoms water; small vessels may anchor in less water, but they will be very close in shore.

The point of the Platform in the north.

The coast from Gonaïves to Cape St. Marc in the east, and the coast north of the Island of Gonaïves in the south, from the Gulf of Gonaïves.

Cape St. Marc is the southernmost point, and forms with the north-east point of the Island of Gonave, the entrance of the Channel of St. Marc.

When you have doubled the false cape, and are two leagues west of Point la Perle, if you are going to St. Marc or to Port au Prince, you must steer for the Channel of St. Marc, which will be a south-east course; after having run sixteen leagues, you will be west of Cape St. Marc, when you will steer for it; but if you are going to Port au Prince, you will continue your course (*south-east*) till you make the Arcadins: Or if it should be night, after having run four or five leagues steer S. S. E. $\frac{1}{2}$ E. to pass in the Mid Channel, between the Arcadins and the east point of the Island of Gonave; having run three leagues this way, steer S. E. $\frac{1}{2}$ E. for four leagues and a half, to make Point du Lamentin, which is on the south side. You must range this coast pretty close without fear, to avoid the shoals of an island of sand which lay a little league to the northward of Point du Lamentin. If you should pass this point in the night, you would do right, after you have run a mile or half a league, to anchor: you will find 12 or 18 fathoms water, the ground good, and the water always smooth.

If you should be forced to turn in the channel of St. Marc, you must not go so near the Island of Gonave as you do the St. Domingue side, which is a safe shore: you may go any where within half a league of it.

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The Arcadins are not much to be feared; there is a shoal runs out from them for a mile, or half a league at the farthest, with 5 or 6 fathoms on it; on the edge of the west and south-west side you will have from 12 to 15 fathoms bottom* (De Cayes); in the hurricane month you are almost sure to have every night violent storms.

The best method to be done, if you are caught in the gale, will be to lay too sometime on one tack and then on the other, as well to avoid the force of the wind as the shoals off the Little Gonaive. If you could have foreseen the gale it would have been best to get an anchorage on the St. Domingue side, near Point D'Archie, or in the north of Leogane.

There is soundings from the white shoals of little Gonaive across to Leogane.

There is a passage between the Arcadins and St. Domingue; the channel is five miles across: in the Mid Channel you will never have less than 10 fathoms. The water diminishes as you go towards the Arcadins, or on the coast side. One mile from the Arcadins you will have 6 or 8 fathoms water. Fond de cayes, at the same distance from the St. Domingue shore, is the like water, but with a muddy bottom.

The greatest length of the Island of Gonaive is ten leagues and a half E. S. E. and N. N. W. its breadth is very regular two leagues from north to south.

The north-east point is low; there is a reef which runs out to the eastward of it for half a league, and runs

* De Cayes, is the word for the ground; I believe it means Coral.

away afterwards along shore to the southward at the same distance from the land.

The eastern point is steep and high; there are no white shoals exactly off it, but you fall in with the white shoals off the Little Gonave, soon after passing the eastern points: they run to within a quarter of a league of the Little Gonave, but do not extend much to the northward of the east point of it; but a league to the eastward. South-east of the Little Gonave is another white shoal, separate from the other about half a mile; its outward extremity is two leagues from the island: there is no danger. Though the bottom appears very white, you will have on it from 7 to 12 fathoms; a large ship ought not to go within a league and a quarter of the Little Gonave.

From the Little Gonave to the west point of the Great Gonave, the coast is safe and clear.

The north side of this island is safe and clear, there is only one shoal, which lies half a league from Point Bahama, situated nearly in the middle of the island.

Leaving Port au Prince and bound to the Petit Goave, you steer along the south coast, at the distance of one or two miles, till you come to the Point Leogane: all this shore is bold and safe.

From Lamentin to Leogane Point there is no anchorage; but there is a good bottom for anchoring from Point Leogane to the anchorage off the city of that name. After you have passed Leogane, you must steer for the Tapion de Petit Goave: you anchor in the bay, leaving a little island that lies off the coast north of the town on your left hand. The town, when you anchor,

anchor, bears nearest E. N. E. * Petit Goave is nine leagues from Port au Prince, but as you are forced to double Leogane, your run is nearer twelve leagues.

From the Tapion of the Petit Goave to the Tapion of Miragoane, the coast runs west by north five degrees north for two leagues and two miles, then west by south for a league and a half, to the careening island of the bay of Miragoane.

Two leagues and three quarters north of this island is the eastern extremity of the white shoal, which joins the reef called du Rochelors.

To anchor at Miragoane, you come within a mile of the Careening Island, when you will see a village at the foot of a mountain, and to the westward you will see some mangrove islands. You keep the mid channel, which is not more than a cable length across, between the first island and the shore where the village is situated; leave the island on the starboard hand: you anchor in from 8 to 18 fathoms, sandy bottom. This anchorage ought not to be taken without a pilot.

From the Careening Island the coast trenches in, and forms the bay; it is shut in. In the north, by Frigate Island, runs a white shoal half a league to the eastward, and nearly south of the anchorage at Miragoane, which obliges you, in coming in or going out, to keep the island shore so close aboard, and makes it dangerous without a pilot. From this place the coast runs west as

* In the chart there is a shoal put down in the middle of the entrance of the Bay, and rocks off Point Antoine, which forms the west side of the Bay.

far as the village of Rochelois, which is situated at the foot of a large mountain.

It is north three degrees east of this village, and three leagues distant, that the reef of Rochelois lays. It is not of very great extent*, some of the rocks are out of water; you may go tolerably near them on the north and south sides. On the west side is a white shoal which runs off for two miles: on the edge of the shoal is 4 or 5 fathoms.

One league east of these breakers is a rocky bottom, but hardly visible; there is from 6 to 8 fathoms on them: they are not above a cable's extent, so that there is nothing to fear but the rocks themselves; they are three leagues from the south shore, and three leagues and a mile from the Gonave. The channel on the north side is as bold as the one on the south side, and as that is very bold, it is easy to avoid those rocks.

From the village of Rochelois to the entrance of the Bay of Baradaïres, the coast runs west by north five

* Mr. de Lieude de Sepmanville surveyed this reef in 1788, and makes its extent from north to south 2000 fathoms, and from east to west 3155 fathoms; and says that he found one place bearing N. N. W. at the distance of 800 fathoms from the middle or dry part of the reef, with only 2 fathoms water on it; and another place 300 fathoms to the north-west of the dry part, with shoal water; and apprehends there are more dangerous spots within the first mentioned space: he had not time to examine it in every part, but is certain of its extent as already described. On our passage from Port au Prince to Jamaica, in his Majesty's ship Centurion in 1791, we stood within half a mile of a shallow spot on the south side of this reef. It bore to the south-west of the dry part, about a half or three quarters of a mile. We found its position from Gonave and St. Domingue, as laid down by the above author, to be correct.

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leagues. The Bay of Baradiers is formed in the east by Point des Roitelets, and in the west by Point Bec du Marsouin, i. e. Porpoise, Snout Point; these points bear from each other N. N. W. and S. S. E. one league and a quarter distant. To anchor in this bay, you keep one third nearer Bec du Marsouin than you do the other side; you range along the peninsula of Bec du Marsouin, and anchor in from 8 to 10 fathoms; there is a great depth of water in the middle of the bay; it is of great extent, and there are shoals which ought to prevent your going in without a pilot of the place.

The north point of the Bec du Marsouin, and the north part of the island of the Great Caymite, bear W. N. W. and E. S. E. and are distant four leagues and a half.

The coast west of the peninsula of Bec du Marsouin, trenches in for two leagues, and forms a bay or bight, then it runs W. N. W. rounding out a little for ten leagues as far as Jeremie. This bight, and the island of the Grand Caymite, forms a large bay, called Caymite Bay, where there is a very good anchorage for all sorts of vessels. You may come without a pilot, and anchor under the island, choosing your depth. You may also anchor in Flamand Bay, near the peninsula; you range along the peninsula side, and anchor opposite a bank of sand, in what depth you please.

The Bay of Caymites offers several very fine anchorages very easy to take with the assistance of the lead alone: there is not a good passage between the Grand Caymites and the shore. You will not find more than 13 feet water upon the white shoals of the Little Caymite, and off the island of Foucard; besides, there are several coral rocks which rise within two or three feet of
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the surface; no vessel but very small ones ever attempt it without a pilot. These white shoals extend three leagues W. S. W. of the Grand Caymite.

From the north part of the Grand Caymite to the Point of Salt River, which is a league and a half W. N. W. of Point Jeremie, is nine leagues and a half; this is the northernmost point from Port au Prince: under Jeremie Point is the village of that name; the anchorage is very small, and not proper for large ships; schooners and small vessels may anchor within the reef; no ships that draw upwards of twelve or fourteen feet should ever anchor, excepting in a case of necessity: there is no shelter for them: beware of norths.

From the point of Salt River to Cape Dame Maria the coast runs W. by S. five degrees, south four leagues and a half.

All this shore is safe and bold within a quarter of a league of it; it does not offer any shelter, though, in a case of necessity, you might anchor in the Bay de Clair, which is a league and a quarter from Salt River. This bay is very small, it would puzzle two ships a hundred feet long to swing clear of each other; it can only serve as a retreat to very small vessels; it is easily discovered by keeping along shore.

When you discover Cape Dame Maria by the false cape of that name, and are half a league distant from it, you will have a bottom in from 15 to 18 fathoms. You may range along this cape at a quarter of a league distance in from 15 to 18 fathoms, weedy bottom.

If you want to anchor in the bay of Dame Maria you must keep the shore on board, steering about S. E. the winds are generally variable; you may anchor W. N. W.

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of a large white tapion, a hill where there is a battery : sounding for your depth—if you go within a mulquet shot of this tapion you will find 5 fathoms. There is bottom in all this bay ; a mile from the shore you will have from 4 to 6 fathoms, and two miles, you will have from that to 10. You are sheltered from the northward, eastward, and southward, notwithstanding which, if you lay in 8 or 10 fathoms, you will feel the swell, if there is a fresh breeze without.

From Cape Dame Maria the coast runs S. by W. $\frac{1}{2}$ W. five leagues to the Bay Des Irois, i. e. Irishman's Bay, and forms, in that distance, several bays, where vessels may anchor. In general a frigate may run in with her lead, and anchor in any part of this coast, there being no shoals nor any thing under water that will bring a ship up; the bottom shoals gradually in shore two leagues and a half. S. S. W. of Cape Dame Maria, and half a league off the point Du Ministre are some rocks, called La Balcine : these rocks are out of the water, they are surrounded by a white shoal which does not extend more than half a cable from them ; there is 4 fathoms on the white shoal : a ship may go between it and the shore, and in the mid channel will have 6 fathoms ; you may go as close as you please to them on the off side ; the sea always breaks on them.

One league and a half from the Balcine is the island of Pierre Joseph, where a convoy might anchor ; the anchorage is very good and easy ; large ships anchor to the S. W. of the island ; all this west part of the coast you find bottom two leagues from the shore. The depth gradually increases as you leave the land, so that in general you will have 4 or 5 fathoms, at one mile distance

10 or 12, at two miles and at a league from 15 to 17; after you get into 30 fathoms you will lose the bottom suddenly.

Irish Point, i. e. La Pointe des Irois, is the westernmost point of the island of St. Domingue, it is not very high, though remarkable, from a small mountain on its extremity, which appears detached from the coast like an island: this point forms the north part of Irish Bay: you may range very close to the land on the north side of the Bay, there being from 9 to 18 fathoms touching the shore.

The anchorage is north-west of a black rock, which you will see a little way to the westward of the town, it will be in from 9 to 10 fathoms, shelly bottom.

There is no other island south of the Island of Rocks, N. N. W. of a small rapion towards the middle of the bay, the depth is 8 to 9 fathoms, the bottom sand and mud.

The bay is exposed to southerly winds; there is always a great sea in it. The Debarcadaire is of course a bad one. The bay is out of the currents, which set to the northward on the west side, and to the south-east on the east side.

The sea in the offing is very turbulent occasioned by the north-east and east winds on the west coast, and the south-east winds which reign on the south side: this bay is terminated in the south by Cape Carcasse, which, with the Falso Cape, form a large round point which ends at Cape Tiburon.

These three capes, seen at a distance, form but one, which is called Cape Tiburon, it is very easily known by its form and height, which is immense; its surface is round,

round, like the back of * *une hotte*, and comes gradually down towards the sea.

Cape Tiburon, properly speaking, is one league and a mile to the south, thirty degrees east of Irish Point; it forms the entrance of Tiburon Bay, which is to the eastward of it; you will not find bottom with 50 fathoms of line two cable's length from the coast, between Cape Carcasse and very near Cape Tiburon; immediately off the latter, at that distance, you will have from 24 to 30 fathoms; a little further out you lose the ground. Tiburon Bay is sheltered in the east and partly in the south by Point Burgos, off which runs a reef a cable's length out; you anchor to the northward of this point, a quarter of a league from the town, in 7 or 8 fathoms, muddy bottom; in most parts of the bay the ground is clear and good. You must not approach too near Point Burgos, west of it the bottom is rocky: you have nothing to fear but southerly winds. Small vessels can get so close to the shore, in 3 or 4 fathoms, as to make Point Burgos shelter them; with all other winds the water is smooth and pleasant: the Debarcadaire is easy to land at. You may get excellent water with ease for your ship.

From Cape Tiburon to Point Burgos is a short league; they bear from each other E. S. E five degrees south, and W. N. W. five degrees north.

From Point Burgos, to a low point called Point du

* Hotte is a French basket, of a peculiar form, not unlike in shape an oil jar.

Vieux Boucand, the coast runs E. S. E. five degrees south, for a league and a quarter: this shore is not so safe as the other part of this coast, as there are some white shoals and a reef of rocks which lay off la Pointe des Aigrettes, but which do not extend more than half a league at the farthest.

From the point du Vieux Boucand the coast runs to the north-east for a league and a half, and then runs out again and forms what is called la Fond des Anglois; all this coast is safe, but does not offer any good anchorage: a ship may anchor very near the land, but will every where be exposed to the sea breezes. From the Fond des Anglois, the coast begins to run again to the E. S. E. a league and a quarter, to a large mountain called les Chardonniers, and which is very easily known from far; then again, after having formed an inlet of half a league, it runs S. S. E. six leagues and a half, to a point called la Pointe à Gravois; during which run it forms several little bays, which cannot be considered as anchorages. The only one of tolerable size is Port Salut, which is a short league N. N. W. of Point à Gravois.

La Pointe à Gravois is low and difficult to distinguish, people often confounding it with Port Salut. From it the coast is not very high, it runs east two degrees north, three leagues to Pointe de Abacou, which is low at its extremity, though in shore it rises a little; it is formed by two points or reefs, which run out for a quarter of a league into the sea. You may pass without fear at half a league distance, and will not find bottom with 40 fathoms of line. At this point begins the inlet, or bay of the Cayes. The coast after having doubled Abacou,
runs

runs away to the N. N. W. then to the north-west, and afterward round towards the east, till you come to the town or city of the Cayes, which bears from Abacou N. by E. 2 degrees east, and is distant three leagues and a half.

The south-west point of the Isle of Vache forms the east side of the entrance of this great bay; it bears E. by N. from Point Abacou, and is distant two leagues and one mile. In the mid channel, between Abacou and the west side of Isle de Vache, you will have twenty-five fathoms, which depth decreases as you approach the Island. Off the south-west part of the island there is a white bottom, with rocks; you will have from 5 to 7 fathoms a mile and a half from the shore, but as you approach Point du Diamant, you will not find the white bottom more than a quarter of a league; but it is clean. When you bring Point du Diamant to bear east, you will have bottom all the way across. There is good anchorage west of Point Diamant, or perhaps better more to the northward, opposite a small sandy bay. You ought to be in from 6 to 7 fathoms, mud and sand.

To go into the Cayes, you range along the north-west point of the Isle of Vache, in 6 fathoms water; and you steer nearly N. by E. to make, on your starboard hand, the White Tapions of Cayajlon. You will then leave on your left hand, a large reef, surrounded with a white shoal, which takes up almost all the middle of the Bay: when you have brought the town to bear N. W. $\frac{1}{4}$ W. you must haul up two points to windward of the town, standing towards the Island de la Compagnie,

where you may anchor if you do not mean to go into the Road; if you do, you must shorten sail a mile from the shore, and wait for a pilot: the passage is two thirds of a cable across. Ships drawing more than 13 feet water cannot go in; ships of 15 and 17 feet water always anchor at Chateaudin, which is half a league to the westward, and is separated from the road or Port by shoals.

To anchor in the Road of Chateaudin, coming from the anchorage of the Isle of Vache, W. or W. N. W. of the Diamand Point, in 8 or 11 fathoms, you must steer directly for Torbec, which is a little town or village very easily seen in the cod of the Bay; this will be about a north-west course: when you are within two miles of the shore you will see a little white flag, which is on a shoal; you double it to the westward at about half a cables length, of course you leave it on the starboard hand; when you have brought it to bear south, you steer along the coast for the Road of Chateaudin, and anchor in 6 or 7 fathoms, muddy bottom.

In all this jaunt, if you have kept the proper channel, you could not have had less than from 7 to 9 fathoms, and often 12 and 16, muddy bottom.

The Isle of Vache is three leagues in the greatest length, its breadth is not more than one; it is hilly, and at the distance of six or seven leagues appears like a heap or pile of islands together. From the N. W. Point, in going to the south-west, the coast is clear and safe, the water shoaling gradually as you come near the land. Off the south-west end is the white shoal already mentioned, which makes it necessary for ships coming from the

the eastward to give it a birth. The south side is bold, there is a reef runs at a cables length distance, the whole length, to the east point off which is a white shoal, extending to another reef laying off the point of la Folle, to the northward.

From the point de la Folle, to the N.W. Point on the north side of the island, there is a chain of shoals and islands, amongst which are some narrow passages,

On the north side of the island is the Bay de Feret, where there is a very good anchorage; but you must be a very excellent pilot before you can attempt it, as you will in many places find 2 and 3 fathoms, if you are not in the channel.

The northernmost of these islands is called Caye de l'Eau, i. e. Water Key; it is easily known by a large tuft of large trees, one of which is considerably higher than the rest: this island is bold.

There is a good anchorage at some distance from it on the north side, in from 15 to 30 fathoms.

From the Cayes the coast runs for a league E. N. E. as far as the Tapion of Cavaillon, which forms the entrance of the Bay of that name; half way between is the Island of Compagnie, where you anchor if you do not choose to go into the harbour of Cayes.

You must not go too close to the south-east part of the Tapions of Cavaillon, as there is a shoal, with only 6 feet water on it, called le Mouton; it lies south-east from the eastern point of the Tapion, about half a mile; there is 8 fathoms between it and the shore.

The Bay of Cavaillon is rather large, though the

anchorage is of very little extent; the coast on the west is too bold, and the bottom rocky. You must anchor on the east side of the Bay, opposite a shore covered with mangroves; you may approach it without fear, the bottom is clean, and you will have 5 fathoms close to the shore. In this Bay you are sheltered from the sea breezes by the eastern point, which belongs to an island, and leaves a passage between the mangroves into the Bay des Flamand.

The Bay des Flamand is a quarter of a league from the Bay of Cavaillon, it is the place where ships lie up in the hurricane months; there is a good careening place: you may anchor any where in the Bay. From this Bay the coast runs E. by N. two miles, as far as the great Bay du Messe. The anchorage is good all over the Bay, but you are no ways sheltered from the southerly wind, as the entrance opens to the southward, and is very large. The coast continues to run to the E, by N. as far as Point Pascal; half way towards it is the Little Bay du Messe, in which you may anchor, but are not even sheltered from the sea breeze. Off the Great Bay du Messe, is a shoal, which lies like a bar across the Bay, and extends opposite the point which lies to the westward of the little Bay du Messe: this bank in some places has not more than from 15 to 18 feet water; it is very narrow, and leaves a passage of a quarter of a league between it and the shore; it does not extend to the southward more than half a league from the shore. If you want to go into the Bay, and draw more than 15 feet, you must keep close to the shore on the west side of the Bay, ranging by Point Pauline: the beginning of the bank is
north

north and south of Point St. Remi, at the distance of about a mile.

Point Pascal is of a white colour; it forms, with a little island that lies to the eastward about half a league, the principal entrance of the Bay of St. Lewis. This island is called Orange Caye. You see it from the entrance of Aux Cayes, which is five leagues distance; it is then nearly in a line with the shore south of the Bay du Mefse.

From Point Pascal the coast runs N. N. E. a mile, as far as Point Vigie, from whence you discover all the Bay of St. Lewis, which is shut in, in the east, by Cape Bonite, which bears from Vigie, N. E. $\frac{1}{4}$ E. two miles. To anchor in the Bay you range along Point Pascal, then Point Vigie, and along the west coast, in 8 or 10 fathoms; the anchorage is west of the Old Fort, about a quarter of a mile from the shore. You ought to see the town between the Old Fort and the shore in the bottom of the Bay. The Old Fort is built upon an island of rocks; there is a passage between it and the shore in 6 fathoms. To anchor before the town; the greatest depth of water opposite the town is 5 fathoms, S. by E. of the Old Fort, at a quarter of a league, and west of Cape Bonite a quarter of a league, is a shoal called le Mouton: there is a good passage between it and the shore; the depth is less considerable though then on the west side of the Bay. You may pass between Orange Key and that shore, in deep water; if you do, you will pass a small island called Rat Caye. You may pass between it and Orange Caye, or between the shore and both; those passages are not large. There are shoals lie off the shore, which makes it necessary to keep closer

to the two islands than the shore. One league and a half distance E. by N. of Orange Caye is Moustique Caye; this island is clear of shoals except very close. You may pass without it or within; on the north side of it, an eighth of a league from the shore, you will have 10 fathoms. If you pass within shore you must not keep too close to the St. Domingue shore, as there is an island between Cape Bonite and Cape St. George, off which is a shoal running out a mile's distance; it is called *la Teigneuse*. North of Moustique Caye is Cape St. George, which you may go near. You will meet with no other shoal till you meet the *Trompeuse*, which is one league and one mile E. N. E. of Cape St. George, and is north of a Caye called *Caye à Ramiers*, which bears E. by N. of Moustique Caye, and is distant two miles. It is easily known by a white tapion, rather steep, and seen at some distance; there is a deep passage between it and Moustique Caye, by which you go into the Great Bay d'Aquin. South of the *Caye à Ramiers* is a shoal, which extends for half a league; in the middle of it there is but 3 fathoms. East of *Caye à Ramiers* is a small island, called *l'Anguille*; in the north-east is another called *la Regale*. The three form an equilateral triangle, the sides of which are nearly half a league. In the E. N. E. and three quarters of a league from the *Caye à Ramiers*, is the large *Caye d'Aquin*, which is an island of a tolerable height, upon which are two white tapions very remarkable. This island runs to the E. by N. it is three quarters of a league long, and about a quarter of a league broad; it is bold on the south side of it. You must take care of the white shoals of the *Anguille*, which are south of the west point, so
that

that it does not leave a passage between Caye à Ramiers and the Great Caye d'Aquin, for vessels that draw more than 12 or 15 feet water.

East of the Island d'Aquin is a white rock, *isolated*, at a short quarter of a league distance; it is called Le Diamant. East of it, at two cables distance on the St. Domingo shore, is the point of Morne Rouge, so that the east point of d'Aquin, the Diamant Rock, and the point of Morne Rouge, form the two passages into the bay. All these shores and islands are bold. You find in the inside, or Morne Rouge passage, 5 and 6 fathoms; in the other, i. e. between d'Aquin and the Diamant, 6, 7, and 8. The bay is very large, and trenches a great way inland, though the water is very shallow; anchoring in 3 fathom you will be a long way from the shore.

There is another passage into the bay, which is going between the Island of Ramiers and the Caye a Moustique; you then steer E. N. E. to put yourself in the Mid Channel between the shore and the island. When you have doubled the Caye à Ramiers you will see La Regale, which is a very low island of Sand; you leave it on the starboard hand, keeping in the Mid Channel between it and the shore. Afterward you haul up for the large Aquin as much as the wind will let you; you anchor to the north of it in 6 or 7 fathoms: you may if you please go farther in, but this is recommended as the best anchorage.

The point of Morne Rouge is very easily known from far by three white tapions, which are very high, they are called Tapions D'Aquin; they form together a large cape, under which is an anchorage in 10 or 12 fathoms.

thorns, at a good distance from the land. This bottom continues as far as the little bay Des Flamonds, which is W. N. W. three degrees west, one league and a quarter from the Tapions D'Aquin. You must observe that from Point Pascal all the capes are cut, i. e. broken and steep, and face to the south and south-east, and as on all this shore the land is white, you see a great many white tapions; the Caye d'Aquin has two, but the highest and easternmost are those of Morne Rouge; with a little attention it would be impossible to mistake them. From the point of Morne Rouge, i. e. the Tapions d'Aquin, the coast runs (after having trenched in a little to the northward to form the small bay Des Flamonds), E. by S. as far as the Cape de Bayenette, which is ten leagues distance: all the shore is bold and free from danger, it does not though offer any bay or anchorage that would shelter you from the common breeze. Two leagues and a half before you come to the Cape Bayenette, the shore is iron bound; there is a considerable depth of water off it.

Cape Bayenette is known by the white tapions which are at its extremity; it forms the entrance of a large bay of the same name, which faces the south-east; it is supposed to take its name Bayenette from the great depth of water found on it, and it being entirely clear of shoals; you are very little if at all sheltered: you must anchor on the north side of it pretty close to the shore. This bay trenches in a league to the northward, afterwards the shore again runs to the east by south for five leagues as far as Cape Jaquemel, which is bold too; the cape is high and steep, it forms the west entrance of the bay of that name. From this cape the coast runs W. N. W. as far

far as Point la Redoute, which is well in the bay; in all this extent you have no bottom; the other entrance is Cape Marechaux. When you are between these two points, and nearly in the middle of the bay, you will see a reef which you must double in the N. N. W. leaving it on the starboard hand. You anchor between it and the shore, which you must keep pretty close to, otherwise you will have a great depth of water.

The anchorage for large ships is east of a white rapion in the bottom of the bay, and west of the great reef. Cape Marechaux bears N. N. E. a short league from Cape Jaquemel.

From Cape Marechaux the land trenches in a little to the northward, and rounds out again to Cape Morne Rouge, which is seen at a distance, and is known by white rapions: it bears east ten degrees north from Jaquemel, and is nine leagues and two miles distant. The coast in this distance forms several small bays where small vessels might anchor; but they will not be sheltered in any of them.

One league and a half east of Morne Rouge is Saletron: there is good anchorage for ships that do not draw more than 16 feet; larger ships may anchor there, but they must lie farther out, where the ground is not so good.

From Morne Rouge the coast trenches in a little to the northward, then out again, running to the E. S. E. as far as the Anse a Pitres, i. e. the Bay of Pitres, which is the last French settlement on the south coast of St. Domingo. All this part of the coast is safe, and you may approach without fear.

There

There is good anchorage at the Anse a Pitres, which is very easy to take; you must not be afraid though of running in. At two miles distance from the shore the water is very deep, the shore appears to be white, and you may anchor either here, or south of a small cape which is before the mouth of a river, and considerable enough to be easily discovered; the water is smooth, you are sheltered. The ground is good in 6 or 8 fathoms, and better in shore in 4 fathoms; from this the coast begins to run to the southward, trenching in though to the eastward one league to form the bay *Sans Fond*. Afterwards it runs S. by W. as far as Cape Lopez, which bears S. E. $\frac{1}{4}$ E. of Morne Rouge, nine leagues distant, and E. by S. seventeen leagues and a half from Jaquemel. From the Cape Lopez the coast runs E. S. E. as far as Cape Beata. And afterward N. E. $\frac{1}{4}$ N. and N. N. E. to form the great bay of Neybe.

South of the False Cape, is an island and rocks called the Frailes, sometimes called Les Prailes; it is bold and safe.

In the S. S. E. is another island called Altavella, as safe and bold too as the other. And one league and a half south of Cape Beata is the isle of Beata; its length is one league north and south, its breadth east and west two miles. There is a breaker off the N. by E. part of it, which runs towards Cape Mongon, at the extremity of which is a white shoal, which very much narrows the passage between Beata and the shore. There is but 3 fathoms water in the passage; there is a tolerable anchorage to the westward of Beata, between it and the shore, in 8 or 10 fathoms, weedy bottom.

You

You may generally see the bottom, near all these islands: the water is deep near the coast of St. Domingo.

When you come from the southward or eastward, and are bound to a port on the north side of St. Domingo, you must make the island of Mona and the island of Monique, which are two small islands situated in the Mona passage, which passage is between Port Rico and the island of St. Domingo: you may go within two miles of either of them. There is an anchorage to leeward of Mona, half a league from it, in 7 or 8 fathoms; the bottom sand with weeds. Your bearings at anchor ought to be the north-west point of Mona N. by E. two miles, the south-west point, off which is a small reef S. E. $\frac{1}{4}$ E. and Monique N. by W. You pass to the westward of Mona, when you have brought it to bear E. S. E. three or four leagues, you will see the coast of St. Domingo. All this south-east part is very low; the current in the channel is easily observed, it runs to the northward.

The point of St. Domingo nearest the Mona is Cape Espada, it is a low point surrounded by a reef, and white bottom: it bears from the Mona nearly W. N. W. and is distant ten or eleven leagues. From Cape Espada the coast runs N. by E. four or five leagues, as far as Cape del Enganno, which is a small flat point, off which runs a reef north-east two miles. When you are abreast of it you lose sight of the islands of Mona and Monique. From del Enganno the coast runs N. W. $\frac{1}{4}$ N. twelve leagues; the coast is low to within 3 leagues south of Cape Raphael, where it begins to rise a little, till you come to Cape Raphael, which is of a middling height; it appears at a distance like an island: it is easily known
by

by a round mountain some distance in land, not unlike a sugar loaf.

From Cape Raphael the coast runs W. by N. and then west, to form the Great Bay of Samana, which is shut in the north-west by Point Grapins, which is two leagues S. S. W. five degrees west of Cape Samana.

Cape Samana is nearly seven leagues N. W. $\frac{1}{4}$ W. of Cape Raphael; you may anchor in the north of the Bay of Samana. In ranging the Point of Grapins, at a quarter of a league distance, you leave on your larboard hand three Cayes covered with wood: when you bring the westernmost to bear S. S. W. you anchor in 15 fathoms water, good ground, a short quarter of a league from the shore; Banister Caye ought to be W. by N. one mile.

The south anchorage of the Bay is very difficult, the passage to it is very narrow; the middle of the Bay is shut in by shoals: in ranging the entrance of the Bay the bottom is seen in 7 and 10 fathoms.

In going south of Cape Espade you will see the small Island of Saona, which is covered with trees, and surrounded by a white shoal, which runs two miles off. It leaves between it and the coast of St. Domingue, which runs west eight degrees north, but a very narrow and shoal passage.

The coast of St. Domingue trenches a little to the northward towards the Island of St. Catherine; distant from Saona eight leagues.

The coast continues to run towards the west some degrees north to the River of St. Domingue, which is thirteen leagues from the Island of St. Catherine, twenty-seven leagues from Cape Espade, and twenty leagues from the

the point of the island of Saona; ships may anchor before the river of Santo Domingue pretty close to the shore, and vessels not drawing more than 14 feet may go into the river.

You will know this place, which is the capital of the Spanish part of St. Domingue, by a considerable fort built on the right hand bank of the River Ozama, upon which is situated the town or city. You will likewise see to the westward of the fort a large savanna, which forms an amphitheatre, and is a fine coup d'oeil.

From St. Domingue the coast runs W. S. W. for fourteen leagues, as far as the Point des Salines, then it trenches in to the northward to form the Great Bay of Naybe, which takes its name from a large river, the mouth of which is in the bottom of the Bay.

From this river the coast runs south to form Cape Beata, which is S. W. $\frac{1}{4}$ W. of Santo Domingue, and distant 24 leagues.

In steering from Santo Domingue to Cape Beata, you must observe the currents run to the eastward, the length of that coast; in the entrance of the Bay Neybe they run feebly to the northward.

I have entered very little into the detail of the Spanish part of St. Domingue, as I had not a good opportunity of visiting it; what I have said is from the authority of English and Spanish writers, that appeared to me worthy of confidence.

WINDWARD PASSAGES.

There are not more than four principal passages, which are,

- I. The Crooked Island, or Leewardmost.
- II. The Caucus, which is to leeward of the Islands of that name.
- III. The Turks Island, which is between the Caucus and Turks Islands; and,
- IV. Between the Silver Cayes and Square Handkerchief.

Crooked Island Passage is the longest, but it is far the best for ships coming out of the Gulf of Gonaives, or from the southern part of St. Domingue; it is also best for ships bound to New England. You take your departure from Cape Nicholas, being two leagues from the Cape in the Offing; you must steer N. by W. twenty-three leagues to make the south-west point of the great Inisague; this course will generally lead you two leagues to the westward of the point. The island of the great Inisague, like all the islands that form the passages, is very low.

You will, in clear weather, see it at the distance of five or six leagues; you need not fear coming within half a league on the west side. You may anchor in a fine bay which you leave on your starboard hand going through the passage. You anchor on the white bottom; chuse your ground by your eye, as in many parts of the white bottom there are stones which arise a considerable height above

above the level of the sand. You will be able to get fresh water with little trouble, and in quantity enough for several ships.

When you are opposite the west point of the Great Iniague, and at two leagues distance, you must steer N. N. W. two or three degrees to the west for 25 leagues, when you will make L'Isle au Chateaux, Castle Island, which you may go within two miles or nearer without fear. If it * should be night before you are off the island of Iniague, it would be adviseable to steer N. W. $\frac{1}{2}$ N. for seventeen leagues, to avoid the Hogsties; then haul up and make good a N. by W. course, when, having run eight leagues, you will be one league to the westward of the Castle Island.

The Hogsties are two small sand islands; on the east side of them is a white shoal, which is surrounded by a

* If you should make Iniague towards the middle of the day, or afternoon, it is best to drop your anchor in the north-west bay, and get under weigh at midnight, or two A. M. according to the strength of the breeze, and steer N. W. $\frac{1}{2}$ N. until you have run sixteen or seventeen leagues, and then haul up N. N. W. or N. by W. and you will have day-light to run through the rest of the passage. But, if you should meet with light baffling winds in the night, and suspect there is a weather current, and are afraid of the Hogsties, keep your deep sea lead going as a guide, for you will meet with soundings of 50, 40, 30, 20 fathoms, according to your distance to the westward of the Hogsties. And if you meet with the wind to the northward, it is best to stand to the westward, and keep your deep sea lead going occasionally; for, if there should be a strong northern current, it may set you near the Mira por Vos. And, if the wind should continue to the northward you may stand to the eastward among the islands and keys. The passages between them all, as laid down in the Chart, are safe.

reef extending a league and a half. The west side of them is clear of dangers, and you might anchor off it, having one of the islands bearing N. N. E. and the other east.

They bear N. by W. from the west point of Iniague.

West of the Castle Island, and three leagues and a half distance, is a shoal, called the Mira-por-vos; it is not unlike the Hogsties; on the west side is an indifferent anchorage; on the south-east side, at a mile distance, you will have from 20 to 25 fathoms, coral and rocky bottom. As this shoal is to leeward, you do not often see it ranging along Castle Island; however, if it was necessary to turn, you might approach within half a league of it. The White Bottom will point it out in good time; all the dangerous part breaks, and is just above water. You may if you please, pass to leeward of this shoal, its extent east and west is about two miles, and north and south near two leagues, and has a rock above water about the size of a ship.

When you are west of Castle Island, you must steer N. or N. by W. seven leagues and a half, to make the west end of the Isle de la Fortune. This course and distance will lead you opposite to it about a league distant; you will continue the same course to make the western extremity of Crooked Island, off which is a small island, called Bird Rock; having run seven leagues, you will be one league and a half west of the small island; so that the direct course from Castle Island, to the head of the Bird Island, is north five degrees west, distance fourteen leagues. When you are arrived at this place, you suppose yourself out of the passage; nevertheless, you have to fear, should the wind be to the north-east, or E. N. E. the island of Wagelin, which bears from the Bird Island

north

north four degrees west, and is distant twenty-three leagues; you ought, therefore, in leaving the passage, to keep as much to the eastward as the wind will generally permit; nevertheless, should the wind be at south-east, which sometimes happens, and you steer north-east, you would make the island of Samana, or Atwood's Key, so that you must observe not to steer higher to the eastward than north-east, or more to leeward than N, by E.

The isles of Acklin de la Fortune and Crooked are united together by a white bottom, which surrounds them entirely. This bottom does not extend on the west side more than half a league, and forms in the bay west of Acklin an anchorage where the water is very smooth.

The Isle de la Fortune does not offer any anchorage, the north-west side is covered by a reef, outside which are some rocks under water, and even outside the White Bottom, which renders it very dangerous to come near.

Crooked Island has an anchorage tolerably good near the Bird Rock on the west side.

This island forms, with the Island de la Fortune, a deep bay (near four leagues depth); at the bottom of which is an anchorage near five islands, which are at the extremity of a low point belonging to Crooked Island, and almost join the north-east extremity of Fortune Island; you let go your anchor in from 10 to 3 fathoms W. N. W. of these islands, and nearer Crooked Island than Fortune Island; the bottom is tolerably good.

East of the low point of Crooked Island, and near the islands, is a watering place.

These islands are bordered by a reef in the north and the east sides; they are low, have some hillocks, and a few shrubs which at a distance appear like plantations.

Though the shore is in general rocky and barren, Crooked Island is no less than the other; it affords nourishment to a few shrubs.

These islands are bold in the east, they are bordered by reefs. The east point of Crooked Island has a reef which runs out to the eastward for half a league, and the point of the Isle of Acklin, which is two miles the other point, has a reef running to the north-east for the same distance; the south-east part of the island is bold and iron-bound.

The island of Samana, or Atwood's Key, is long east and west. It is very narrow; and of course little extent north and south: the eastern point is more to the northward than the west point; it is surrounded by a white shoal, bordered by a reef. Off the west end the reef runs out for a league; under this point is an extent of a league along the shore, where there is no reef, and where vessels might anchor in the White Bottom in 7 or 8 fathoms, very close to the shore. Off the edge of the White Shoal you will not find bottom. *In the east* of the island are two small islands, a league and a half from the shore, and surrounded by reefs and white shoals. The island is low, and offers the same appearance as the others do.

The island of Watelin is low, and covered with a reef in the east and south sides. The south-east point has a shoal without a reef, near half a league out: the west side is safe, and offers an anchorage on the White Bottom, but very close in, and not more than half a cable off. The north-west part is covered by two or three white islands, surrounded by white shoals and reefs, which extend

tend to the west half a league, and on the other side till it joins the north-east point.

You have no occasion to fear the currents in this passage, if you have a fresh breeze they are hardly existing; in calms and light winds they may set you to the westward, but so feebly that in a passage so short you ought not to mind it, particularly as you generally make it with a large wind. Nevertheless, in the months of June, July, and August, when you may have calms or light westerly winds, you may have a current setting to the west strong enough to alter your course, which effect can only happen in this passage. The cause is the proximity to the shoals forming the channel of Bahama, and those of the island of Providence. In this season it would be proper, if you have not wind sufficient to make you go more than two knots an hour, to allow a quarter of a mile an hour for a current setting to the westward; if you go three knots or upwards, it would be unnecessary.

THE CAYQUES PASSAGE.

This is the best passage to take from Cape * Francois, when you cannot be certain of E. S. E. winds. You always go with a large wind, and do not risk making the land on the south-east part of the Cayques, which is always dangerous. In leaving the Cape you must steer a N. by W. course; after having run thirty-five leagues

* Ships from Jamaica bound through this passage, when they get as far as the east end of Tortudas, if they can lay N. by E. you may then stand to the northward, and take the chance of weathering Mogane; and if they cannot do it without much beating, it is best to bear away under the west end of it.

you will find yourself two leagues and a half south-west of the Little Cayques, when you may haul your wind as high as north; not higher till you have passed the reefs of an island of sand which lies to the north of the Little Cayques; after passing them, you may steer N. by E. for five or six leagues, when you may haul up north-east, or you may continue on, should the wind not suffer you to haul up while you make good a north course. After having run ten or twelve leagues you are out of the passage.

If it should be dark, and you are two leagues south-west of the Little Cayques, and the winds do not permit you to steer N. by E. or to make good a north course, the best way, after having run for thirteen leagues, and do not see the island of Mogane, is to tack and stand to south-east for three or four leagues; then tack again, and you will weather by three or four leagues the breakers off the east point of Mogane. If you are in the above station, and the winds will not suffer you to lay north, you must not attempt to go to windward of Mogane, but go to leeward between it and the Plate Islands. You must steer for it N. W. $\frac{1}{4}$ N. Having run eighteen leagues, you will see Mogane, the west point of which ought to be north of you; and two leagues distant, you do not run any risk in approaching this part of the island, which is safe. There is a small white shoal runs off from the point; there is 3 fathoms water on it, close to the shore. When you have doubled the point so as to bring it to bear east, you might, if the wind would permit, steer north. If you do, you will pass three or four leagues to the windward of the inland of Samana, or Atwood's Key; but, if your course is not better than N. by W.

N. by W. after having run on for twelve or thirteen leagues, and the night comes on before you can see Samana, or Atwood's Key, tack and stand on for five or six leagues. When, if you can, make good a N. by W. course on the other tack, and you will weather the eastern breakers of Atwood's Key by three leagues. If you should be two leagues from the west point of Mogane, and the wind will not permit you to make better than a N. N. W. course, after having run six leagues, you will see the Plate Islands bearing W. N. W. distant two leagues. You may pass to windward or to leeward, as the wind may admit, when you are two leagues N. N. W. or N. W. by N. and after running twelve or thirteen leagues, you are out of the passage. You must not go to the northward of this course, as the breakers on the west point of Samana, or Atwood's Key, bear from the western Plate Island N. N. W.

The Plate Islands are very low, they bear from the S. W. point of Mogane N. W. $\frac{1}{2}$ N. and are distant eight leagues and three-quarters. You may go pretty close on the east, north, and south sides; the white bottom being pretty steep. On the N. W. of the large island the reef runs out some little distance, which makes it necessary to give it a good birth. You may anchor on the S. W. part on the white bottom, but very close to the shore there is a small lagron of fresh water, supplied solely by the rain.

The Little Iniague is to the leeward of the Little Cayques, and is seldom seen by navigators, whose wish, in general, is to cross this archipelago as quick as possible: nevertheless, as you may have a N. E. wind in the mid channel between the Caucus and St. Domingue, it

It is right to know the east side of the Great and Little Iniague: the Little Iniague bears west eight degrees South from the small Cayques, and is distant nine leagues; it is rather low, and very much like the islands already described: it leaves a very good and deep channel of a league and a half between it and the north part of the Great Iniague: the two shores are bold. Within a cable's length of the shore you may go within a mile of any part of the Little Iniague. There is a small reef which does not run out a mile off the S. E. part. On the south side there is a white bottom bordered by a reef, at the foot of which you will have 40 fathoms: if you are drove by the winds near Little Iniague, and we will suppose N. E. of the east point of it, one or two leagues distance, you must steer N. N. W. fifteen leagues, when you will be two leagues south of the west point of Morgane, when you are to proceed as already said.

The east side of the Great Iniague is bordered by a reef* which runs near the shore in a N. N. E. and S. S. W. direction for six leagues, then it runs west by south nine leagues, and joins the point called La Pointe des Paille Encul, off which runs a reef two miles out.

Leaving Cape Francois you generally find the wind at S. E. or E. S. E. and near the shore the current runs to windward: which is a great temptation to steer N. E. or N. N. E. to try for the Turk's Island Passage; but about ten or eleven o'clock the wind generally chops round to

* This reef extends to the distance of two miles from the south-east point, on which is a small island, with a white bottom and patches of rock round it.

the E. N. E. or N. E. and when you get four or five leagues out the current is no longer sensible. You run a great risk should it be the case to get among the white shoals south of the Cayques which occasions so many shipwrecks: and I do not think it worth while running the risk for the sake of being twenty leagues to windward in a passage one thousand five hundred leagues long. I therefore always recommend to steer at once for the Little Cayques.

Description of the Cayques Islands.

The Cayques are an assemblage of islands surrounding a white shoal, some parts of which are very shallow, and others tolerably deep; these are four principal islands. The Grand Cayques, the North Cayques, the N. W. Cayques, sometimes called the Providenciers, and the Little Cayques; they form, together, a semicircle from the east to the west, rounding out to the northward; the south part is filled up by a great bank, on which you will find from 3 to 15 feet water.

The north part of these islands is bordered by a white shoal, on which is a reef extending half a league in the N. E. part; the white shoal runs out in a point for a league: at the extremity of it is a reef called Basse St. Philippe, on which the water breaks with a great deal of violence; at a cable's distance in the north, and in the east of it, you will not find less than 7 fathoms. South of it, the White Bottom runs to the south, and approaches insensibly towards the shore: there is not less than 4 or 6 fathoms between it and the shore, which, in a case of necessity, leaves a sure passage.

The coast east of the Great Cayques, and the coast west of the Little, are safe and bold to within half a league of the shore.

From the beginning of the south point of the Little Cayques there runs a chain of breakers to the east for three leagues; after which they decrease and run towards the south to join an island of sand called French Caye; it is low and has some bushes on it: it bears from the south point of the Little Cayque E. S. E. and is distant five leagues. The reef from French Caye runs to the south three leagues and a half to join an island of sand which has not more than 20 paces extent and is entirely drowned at high water: all this part of the reef is bold, and as the water breaks upon it, you easily see it. South of the Island the water does not break; and you cannot be adverted of the edge of the bank but by the whiteness of the water.

From this sand island the bank runs a short league to the south, then to the south-east for three leagues, when it trenches into the north-east, and afterwards runs S. S. E. two leagues, till it comes opposite the island in the south of the Cayques, which are situated a league within the white water. These islands are in the latitude twenty-one degrees ten minutes north.

From the sand islands already mentioned, to the part of the bank opposite the south island, is very dangerous: you cannot see the land; and you pass suddenly from a sea without bottom to the bank, on which you will only have 2 or 3 fathoms. The colour of the water is the only thing can advert you of your danger; and this is by no means certain, besides, frequent disappointments from the shadow of clouds, have given sailors, in this
part

part of the world, such a fatal security and confidence, that too often they mistake the substance for a shadow. No motive ought to induce a man to approach this part of the bank; he would do right to keep at a distance. If after having been turning to windward several days in this neighbourhood, and you have not seen the land, you would do right never to cross the latitude of twenty-one degrees in the night, but wait for the day, when, should you see the change in the water, without seeing land or breakers, you may be sure you are on the west side of them, when you may steer N. W. and N. W. $\frac{1}{4}$ W. to make the Little Cayques, and go through the passage to leeward of the islands. If you should see the islands in the south bearing about N. or N. W. you may stand on upon the white water in from 7 to 12 fathoms; make a tack or two, get to windward, and go through the Turk's Island Passage, which is to windward of the Cayques.

As soon as you see the Islands south of the Cayques the bank is no longer dangerous, and you may go on it as far as a league or a league and a half. South and S. W. of these islands you will not have less than 7 fathoms, and generally from 9 to 11.

From the westernmost of the southern islands, which is a league within the bank, the bank then runs as far as the easternmost island, running first south three leagues, then east seven, afterwards north two leagues, and rounds in to join a large island to the north-westward three leagues.

The Turk's Island Channel is six leagues across in the narrowest part: it is a good passage, and without any danger, you may come within half a league of the Cayques,

Cayques Passage.

ques, and on the east side of the islands without fear. You may turn through this passage with great safety, and will not feel the current if you do not come within a league and a half of the shore.

You will find an anchorage on the white shoal near the south point of the Great Cayques, which may serve as a retreat for ships that do not draw more than 15 or 16 feet: there is, west of this point, a lagron with fresh water.

The best anchorage for small vessels is west of the North Cayques, near the small Island of Pines in the inlet, which that island makes, with the Providenciers, it is within the reefs that border that part of the coast. You anchor in 3 fathoms upon a white bottom: there is good water which the Providenciers are forced to send for; you will discover the entrance of the bay by coasting along the reef from the rounding in of the coast after passing the west point of the Booby Rocks. When you see a great extent of white water within the reef, you must send your boat to find the channel, and moor her in it: you will of course use your lead, and if you want to get in, you must not be afraid of getting near the reef. When you are once within the reef you may let go your anchor in 3 fathoms: you may go farther in by towing or turning, but with great precautions; the entrance is not more than half a league, or two miles from the shore.

W. by S. of the Booby Rocks is the N. W. point of the Caye de Providenciers, the reef finishes at this point; you may go within a quarter of a league of the west point. You may anchor off this coast in 8 or 10 fathoms: you must be pretty close to the shore before you

you will be in the White Shoals: you must bring a hill or mountain that is a quarter of a league in shore, to bear S. W. One league and one mile south of the N. W. point is a reef which parts from the shore, running S. W. $\frac{1}{4}$ W. two leagues and a quarter; this reef joins a small sand island which is almost under water: it bears S. W. from the new point of the Providenciers' Caye, at the distance of three leagues.

From this island of sand the reef runs to the eastward, and afterward trenches out to join the north part of the Little Cayques, which is covered by white shoals.

The Little Cayques bears S. W. $\frac{1}{4}$ S. from the N. W. point of the Providenciers' Caye, which is of a middling height, and of white colour; you may range along the N. W. part close to the edge of the White Shoal; the west part is very bold to the south point, where you may anchor in from 5 to 7 fathoms on the white bottom.

TURKS ISLAND PASSAGE *.

This passage is very short and very good: but you cannot always be sure of fetching it from Cape Francois. You ought to steer N. E. $\frac{1}{4}$ E. and the wind often will not admit to steer so much to the eastward; it is therefore recommended in leaving the Cape, to keep your wind as close as you can with the early breeze, and tack so as to fetch into the Grange before night. You will generally bring it to bear S. E. or S. S. E. If your ship sails well, or you have been favoured by the breeze, you may bring it to bear south †, when making

* The Description of the Cayques Islands, &c. mention a great deal of the navigation of this passage, and ought to be read by people meaning to go through it.

† There is a shoal off the Grange described in the first part of the Work.

good a N. N. E. course, and running twenty-leagues, you will see Sand Caye, the southernmost of the Turk's Islands. You must endeavour to make this Island, but should you not be able to have made good a N. N. E. course, you need not tack till you have run eighteen or nineteen leagues: if you course should not have been better than N. by E. or N. take particular care not to pass the latitude of twenty-one degrees. In the night, when you think you are near that latitude, be sure to sound, and the moment you have bottom, about ship, and stand the other way till morning, when you may again tack and fetch to windward of the white shoals of the Cayques. The white bottom is very easily seen, you may run on from the edge of the bank, on the south of the south islands of the Cayques, for a league, or perhaps a league and a half, in from 7 to 14 fathoms: further on there are rocks with 3 fathoms at the most on them. In the day time you may stand on to the northward (this is supposing you have not seen the land), and you will see the islands south of the Cayques, or if you are further to windward Sand Caye. You must be careful not to go to leeward of the White Shoals, which extend south of a small sand island, which is entirely drowned at high water. It is very difficult to be seen, and your lead even cannot give you warning, as you fall at once into 3 fathoms.

When you have Sand Key bearing east, at the distance of two, three, or four leagues, steering N. by E. or N. N. E. eight or ten leagues, it will entirely clear you of the Passage,

South-

• South-west of Sand Key is a white shoal, running out for a league and a quarter of a mile from the shore; you will find on it from 7 to 9 fathoms.

In going through this Passage, keep the Turk's Island side on board, to avoid a reef, called *Basse St. Philippe*, which is off the north-east part of the Cayques, and described before in the description of those islands.

DESCRIPTION OF THE TURKS ISLANDS.

There are three principal, La Grand Saline, called by us the Great Turk, La Petite Saline, called by us Salt Caye, and the third Sand Caye.

The west side is bold; there is a white shoal, with rocky spots, which extends about a quarter of a league from the shore.

There are two places to anchor off the Great Turk:

• In 1790, his Majesty's ship *Endymion* was lost on some dangerous rocks near this key. The north part of Sand Key bore from the ship when on shore N. N. E. and the south part N. E. distance about seven miles. Lieut. Woodriff, Commander of the *Endymion*, surveyed these rocks, and found them to extend about a cable's length from the ship. She lay on the eastern and shoalest part, and on one of the rocks that kept her up was only 9 feet water, and 7 fathoms close to it. There are several of these rocks with 2, 3, or 5 fathoms water on them, and within a cable's length of ocean water to the southward and westward. Between them and the south end of Sand Key the soundings are tolerably regular. Quere; if this is not the shoal that has been called the Swimmer, and laid down in most Charts near the Cayques Bank. The Author has enquired of many Navigators that have used this channel, and have not met with any that have seen the Swimmer, but have met with several that have seen the above-mentioned rocks, and give the same bearings for them as Lieut. Woodriff.

one towards the middle of the island, opposite what is called the town, the other off the south part of the island; neither of them can be considered as good. You let go your anchor as soon as you are on the white bottom, and take care to find out a clear bottom, as in some places the points of rocks rise to within 8 or 10 feet. After you have let go your anchor, and veer to half a cable under your stern, you will not find bottom.

In the south part of the island, the anchorage is of more extent, and you will find on the point, near which you anchor, a lagoon of water that may serve for cattle. The white shoal south-west of Sand Caye diminishes gradually.

East of these islands are several small islands, which are joined by white shoals, they are bold on the east side, the white shoals extends to the south-west, and joins that one south of Sand Caye.

THE SQUARE HANDKERCHIEF*, OR MOUCHOIR QUARRE.

This shoal is very dangerous, and has much more extent than has ever been given to it before. It bears S. S. $\frac{1}{2}$ E. of Sand Caye, and is distant seven leagues. Upon the edge of the white bank from the W. S. W. of

* In January, 1790, we stood (with his Majesty's ships Centurion and Blonde) close to the breakers on the north part of the Square Handkerchief. From our latitude at noon we made the latitude of the breakers 21 degrees 17 minutes north; and from several sets of good Lunar Observations, make their longitude 70 degrees 36 minutes west of Greenwich. We had several good sets of Lunar Observations on the three following days, which perfectly corresponded with the former.

the Square Handkerchief, as far as the south-west, you will have from 11 to 14 fathoms. On the north-west edge, there is a caye or bank, on which there is but 8 or 10 feet. From this shoal the bottom runs E. by N. seven leagues to a part of the shoal where the water breaks with great violence. It is natural to suppose that all this interval is full of sunken cayes and shoals, which render it very dangerous to approach, on the south and south-west part the bottom shews and gives warning; you will find 10 and 15 fathoms: however, the best way is to bear up, and pass to leeward, without you are sure of being on the east end, and can weather them the next tack.

On the 3d of June, 1785, at 6 o'clock in the morning, we entered on the edge of the south-west bank, found from 11 to 14 fathoms, bottom corral. We stood to the N. N. E. at 50 minutes after 7, sounded in 14 fathoms, saw a-head, and a little to windward withal, a bottom which appeared nearer the surface, bore up, but too late, for the vessel was stranded on a sunken caye in 9 feet water. This may shew how dangerous it is to run on this water. Close to the north-west edge of this Caye we could not get bottom in 40 fathoms. It lies in the latitude of 20 degrees, 59 minutes, 40 seconds, and longitude 73 degrees, 18 minutes from Paris.

THE SILVER CAYES.

This shoal has more extent than the Square Handkerchief; the southern point is in the latitude of 20 degrees 13 minutes, and the northernmost part in 20 degrees, 32 minutes. It is very white in many places,

H

par-

particularly on the north part, and very dark in the south and south-east.

The north and N. N. W. parts have some Cayes with no more than 8 or 9 feet water, and perhaps less. These Cayes are not exactly on the edge. It appears from information of a Master of a Schooner, drawing 9 feet water, who was shipwrecked on the Silver Cayes coming down, that he had run near a mile south-west on very white water before he struck. The eastern, or rather the north-east edge, is very dangerous. There are three Cayes within a cable's length of the edge: they have not more than 10 or 12 feet water.

The east part of the Silver Cayes have been surveyed in 1753, by *Monf. le Comte de Kersouet*, who, at that time, commanded the French King's ship *l'Emerande*, in following his route, and trying his longitude, soundings, &c. I found them agree so well that there remains nothing to desire on the position of the east point of this shoal. The west side of the shoal is safe there is a great depth of water. On the east side, at a league and a half distance, the bottom diminishes: you see in the N. E. the shoal very plain, and near the surface.

Ships ought never to enter on any part of them, as you will often find from 14 fathoms to 10 feet; if by accident they do, the best way is to tack, and go out the same way you came in.

If you should, by any circumstances, be forced to go from Cape Francois through the channel between the Square Handkerchief and the Silver Cayes, you must make your course good N. E. by E. and E. N. E. If the wind would suffer you to steer that course, you would

pass

pass in the mid channel; but if you are forced to turn, and dare not make the St. Domingue shore, after you have once got into the longitude of seventy-two degrees forty minutes, from Paris, you must not pass the latitude of twenty degrees twenty-five minutes, without frequently sounding. If you get into twenty degrees thirty-five minutes, without having bottom, you have nothing to fear from the Silver Cayes: you must then look out for the Square Handkerchief, which is not dangerous, in the south the bottom giving you notice in 10 and 15 fathoms. You must continue to get to the eastward withal; when you are in the latitude of twenty-one degrees twenty minutes you are entirely out of the passage.

The Silver Cayes are eleven leagues east and west, and seven leagues north and south; the westernmost part is north and south of Old Cape Francois.

The Square Handkerchief and Silver Cayes bear from each other south-east and north-west. The channel between the two shoals is very safe: it is fourteen leagues across.

You find, at the edge of those shoals, weak currents, which generally set along the edges of the bank. On the square Handkerchief they are scarcely felt. On the south-east part of the Silver Cayes you find them setting to the west and north-west, a league from the bank: they are not sensible.

In general you ought not to mind the weak currents which exist in these passages: they are no where to be feared.

F I N I S.

parts in the line channel, but if you are to land to the
 and does not make the St. Domingo light, after you
 have once got into the harbour of Shiver Cay you will not see
 gives four minutes, from Paris you will not see the
 latitude of twenty degrees twenty-five minutes, without
 frequently landing. If you get into twenty degrees
 thirty-five minutes, without having landed, you have
 nothing to fear from the Shiver Cay: you must then
 look out for the Spanish light, which is not far
 hence, in the south the light is giving you notice to
 sail a distance. You must continue to go to the east
 wind wind: what you are in the latitude of twenty
 one degree thirty minutes you are nearly out of the

The Shiver Cay is a small island, and is not far
 from the point of the land, and is the only one of the
 north and south of Old Spanish Cay.
 The Shiver Cay is a small island, and is not far
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 north and south of Old Spanish Cay.



between the two points is very small, it is however
 frequent.
 You find, at the edge of these shoals, weak currents
 which generally set along the edge of the bank. On
 the igneous flank which they are found. On the
 south-east part of the Shiver Cay you find a strong
 to the west and north-west, a large one from the bank,
 they are not strong.

In general you ought to avoid the weak currents
 which are in the line of the light, and to go to the
 south.